The Kingdom of Denmark's

Report on Assigned Amount

- under the Kyoto Protocol

Ministry of the Environment

CONTENTS

FOREWORD

On behalf of the Kingdom of Denmark I present this report with information for the final establishment of Denmark's and Greenland's base year and assigned amount under the Kyoto Protocol and Denmark's base year and assigned amount for burden sharing of the EU target for reductions in emissions of greenhouse gases 2008-2012 in accordance with the Kyoto Protocol. In accordance with a request from the Faroese Parliament the Kyoto Protocol was ratified with a territorial exclusion to the Faroe Islands. The report has been prepared with a view to submission to the secretariat of the United Nations Framework Convention on Climate Change.

In addition to Denmark's and Greenland's commitment to reduce total emissions of greenhouse gases by 8 per cent in 2008-12 compared with the base year, Denmark has in connection with ratification by the EU of the Kyoto Protocol in 2002 accepted a legal commitment to reduce Denmark's emissions of greenhouse gases by 21 per cent in 2008-2012 compared with the base year. Therefore the report includes both the assigned amount for Denmark calculated in accordance with Article 3 of the protocol and the agreement under Article 4 of the protocol and the assigned amount for the Kingdom calculated in accordance with Article 3 of the protocol.

Information on Denmark's and Greenland's choices regarding the base year for the industrial gases and choices regarding the question of including the emissions and removals from a number of specific agricultural and forestry activities is also included in the report.

Copenhagen, December 2006

Erik Jacobsen
Permanent Secretary

Summary

This report is the Kingdom of Denmark's report to the secretariat of the United Nations Framework Convention on Climate Change with information to establish the assigned amount for emissions of greenhouse gases in the period 2008-2012 which the Kingdom excluding the Faroe Islands is committed to comply with under the Kyoto Protocol and which Denmark is committed to comply with under the agreement between 15 EU countries on joint fulfilment of reduction targets under the Kyoto Protocol, also known as the Assigned Amounts Report.

On the basis of the following information:

- Denmark's and Greenland's latest inventory of emissions of the greenhouse gases listed in annex A of the Kyoto Protocol in the period 1990-2004,
- Denmark's and Greenland's choice of 1995 as the base year for industrial greenhouse gases (HFCs, PFCs and SF_6) cf. Article 3(8) of the Kyoto Protocol, and
- that there was no deforestation in Denmark and Greenland in 1990 and therefore no supplement, cf. Article 3(7) of the Kyoto Protocol,

the total emissions in the base year for Denmark and Greenland under the Kyoto Protocol amount to 69,973,617 tonnes CO_2 equivalents and of which the base year for Denmark amounts to 69,323,336 tonnes CO_2 equivalents cf. the table below.

Tonnes CO_2 equivalents	Denmark under the EU	Greenland	Denmark and Greenland
CO_2 (1990)*	52,712,457	625,071	53,337,528
CH_4 (1990)	5,692,000	16,151	5,708,151
N_2O (1990)*	10,593,311	8,998	10,602,309
HFCs (1995)	217,728	25	217,753
PFCs (1995)	502	0	502
SF_6 (1995)	107,338	36	107,374
Base year	**69,323,336**	**650,281**	**69,973,617**
Annual Assigned Amount in %	79%	92%	DK79%+GR92%
Annual Assigned Amount in tonnes	54,765,435	598,258	55,363,694
Total Assigned Amount 2008-12	**273,827,177**	**2,991,292**	**276,818,469**
a. 90% of AA	246,444,459	2,692,163	249,136,622
Most recently reviewed inventory (2003)*	74,007,808	634,000	74,641,808
b. Times 5 (100%)	370,039,040	3,170,000	373,209,040
*Most recently inventory (2004)**	*68,092,442*	*698,276*	*68,790,718*
c. Times 5 (100%)	*340,462,209*	*3,491,379*	*343,953,589*
CPR (lowest of a and b *or* c)	**246,444,459**	**2,692,163**	**249,136,622**

* without LULUCF

The Kingdom of Denmark's reduction commitment under the Kyoto Protocol comprises Denmark's 21% reduction commitment under the EU Burden Sharing Agreement and Greenland's 8% reduction commitment as part of the Kingdom's reduction commitment under the Kyoto Protocol due to Greenland not being a part of the EU and subsequently not being included in the EU Burden Sharing Agreement.

Denmark's assigned amount under the Burden Sharing Agreement amounts to 273,827,117 tonnes CO_2 equivalents.

Denmark's and Greenland's total assigned amount under the Kyoto protocol amounts to 276,818,469 tonnes CO_2 equivalents.

The commitment period reserve for 2008-2012 of 90 per cent of the assigned amount is 249,136,622 tonnes CO_2 equivalents.

For inventories of emissions and removals associated with afforestation, reforestation and deforestation since 1990 under Article 3(3) and forest management under Article 3(4) of the Protocol, the following forest definition will be applied:

- Minimum values for tree crown cover: 10 per cent crown cover for forest.
- Minimum values for land area: 0.5 ha.
- Minimum value for tree height: Trees must be able to reach a minimum height of 5 m on the site.

Inventories of emissions and removals under Article 3(3) and Article 3(4) will be prepared for each year in the period 2008-2012 and reported annually in 2010-2014 together with the other greenhouse gas inventory information. It is the intention to account annually for each activity under Article 3(3) and Article 3(4).

For the first commitment period, it is possible to include emissions and removals from agricultural and forestry activities under Article 3(4) of the Kyoto Protocol. In this regard it has been decided to include emissions and removals from forest management, cropland management and grazing land management.

The national system of emissions inventories has been built up so that since 31 December 2005 it has met the requirements under the Kyoto Protocol and the EU Council Decision for a monitoring mechanism.

The national system will identify land areas associated with the activities under Article 3(4) of the Kyoto Protocol in accordance with definitions, modalities, rules and guidelines relating to land use, land-use change and forestry activities under the protocol by satellite monitoring, use of EU Land Parcel Information System (LPIS), detailed crop information data on field level, soil mapping and sample plots from the national forest inventory (NFI).

Denmark's National Emissions Trading Registry was opened on 1 January 2005. The registry has been designed to manage holdings and transactions in emissions allowances allocated to enterprises covered by the European Union greenhouse gas emission trading scheme (EU ETS). It will also be possible to use the registry to manage holdings and transactions in EU allowances and Kyoto units during the Kyoto Protocol's first commitment period.

Introduction

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This report is the Kingdom of Denmark's report to the secretariat of the United Nations Framework Convention on Climate Change with information to establish the assigned amount of greenhouse gases in the period 2008-2012, which the Kingdom excluding the Faroe Islands is committed to comply with under the Kyoto Protocol and which Denmark is committed to comply with under the agreement between 15 EU countries to fulfil the reduction targets under the Kyoto Protocol jointly – also known as the Assigned Amounts Report.

This report collates the required information. However, the report only relates the overall results for the information on the most recent emissions inventory for the period 1990-2004. For more detailed information on the emissions inventory for 1990-2004, including information on methods and emissions factors, please see the 2006 National Inventory Report submitted in April 2006 and the sections from this report with updated information on Greenland submitted in December 2006.

1 Part One

1.1 Denmark's and Greenland's emissions and removals of greenhouse gases 1990-2004

Denmark's and Greenland's greenhouse gas inventories are prepared in accordance with the guidelines from the Intergovernmental Panel on Climate Change (IPCC) and are based on the methods developed under the European CORINAIR programme.

Denmark's total emissions for the period 1990 to 2004 of the greenhouse gases CO_2, CH_4 and N_2O and the industrial gases HFCs, PFCs and SF_6 calculated in CO_2 equivalents in accordance with the general rules for inventories under the Climate Convention are shown in table 2.1.

Greenland's total emissions for the period 1990 to 2004 of the greenhouse gases CO_2, CH_4 and N_2O and the industrial gases HFCs and SF_6 calculated in CO_2 equivalents in accordance with the general rules for inventories under the Climate Convention are shown in table 2.2.

For further information please see the April 2006 National Inventory Report[1] from the National Environment Research Institute to the secretariat of the United Nations Framework Convention on Climate Change, which includes emissions data in the Common Reporting Format (CRF) and the required information on the methods etc. In December 2006 Annexes 6.1 and 6.2 of the April 2006 National Inventory Report have been updated with complete estimates of Greenland's total greenhouse gas emissions. These updated annexes will be submitted to the secretariat in conjunction with the report on assigned amount.

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[1] http://cdr.eionet.eu.int/dk/Air_Emission_Inventories/Submission_EU/envq8jhcq

TABLE 2.1 DENMARK'S TOTAL EMISSIONS AND REMOVALS OF GREENHOUSE GASES 1990-2004

Source: National Environmental Research Institute (NERI)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
	CO$_2$ equivalents (Gg)														
Net CO$_2$ emissions/removals	53264	61707	56056	58599	61630	58785	72755	63291	58456	56311	54712	53913	52297	57514	51661
CO$_2$ emissions (without LUCF)	52712	63394	57602	59753	63243	60450	73967	64464	60403	57532	53070	54669	54262	59454	53941
CH$_4$	5692	5756	5759	5895	5895	6025	6108	5991	6015	5893	5880	6026	5985	5966	5765
N$_2$O	10593	10405	9981	9768	9600	9514	9174	9101	9038	8750	8545	8297	7944	7898	7589
HFCs	NA,NE,NO	NA,NE,NO	3	94	135	218	329	324	411	503	605	647	672	695	749
PFCs	NA,NE,NO	NA,NE,NO	NA,NE,NO	NA,NO	0	1	2	4	9	12	18	22	22	19	16
SF$_6$	44	64	89	101	122	107	61	73	59	65	59	30	25	31	33
Total (with net CO$_2$ emissions/removals)	69594	77931	71889	74457	77382	74650	88429	78784	73989	71534	69819	68936	66945	72123	65813
Total (without CO$_2$ from LUCF)	69042	79618	73435	75611	78995	76314	89640	79957	75935	72756	68177	69693	68910	74064	68093
GREENHOUSE GASES SOURCE AND REMOVALS CATEGORIES	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
	CO$_2$ equivalents (Gg)														
1. Energy	52121	62722	56824	59032	62610	59984	73574	63907	59884	57109	52601	54231	53853	59197	53525
2. Industrial processes	2189	2294	2331	2405	2504	2676	2780	2970	3011	3185	3367	3293	3190	3213	3060
3. Use of organic solvents and other products	137	135	133	131	128	123	127	127	119	116	120	113	106	107	113
4. Agriculture	13038	12904	12587	12445	12173	11983	11612	11431	11437	10853	10611	10577	10258	10031	10000
5. Land-use change and forestry (LUCF)	552	-1687	-1546	-1154	-1613	-1664	-1211	-1172	-1946	-1221	1642	-757	-1965	-1940	-2280
6. Waste	1547	1564	1561	1598	1580	1548	1546	1521	1483	1493	1478	1479	1502	1515	1394
7. Other	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 2.2 GREENLAND'S TOTAL EMISSIONS AND REMOVALS OF GREENHOUSE GASES 1990-2004

Source: National Environmental Research Institute (NERI)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
	CO_2 equivalents (Gg)														
Net CO_2 emissions/removals	625	610	596	546	496	535	598	618	579	594	667	617	579	637	670
CO_2 emissions (without LUCF)	625	610	596	546	496	535	598	618	579	594	667	617	579	637	670
CH_4	0.77	0.77	0.78	0.43	0.78	0.78	0.78	0.78	0.76	0.73	0.69	0.68	0.65	0.67	0.68
N_2O	0.027	0.027	0.027	0.026	0.024	0.025	0.027	0.027	0.026	0.027	0.028	0.027	0.026	0.027	0.028
HFCs	NO	NO	NO	NO	NO	0.025	0.077	0.39	0.71	1.26	1.85	2.93	3.85	4.69	5.35
PFCs	NO	NO	NO	NO	NO	0	0	0	0	0	0	0	0	0	0
SF_6	NO	NO	NO	NO	NO	0.036	0.0034	0.0034	0.0033	0.0033	0.0033	0.0032	0.0032	0.0032	0.0031
Total (with net CO_2 emissions/removals)	650	635	621	570	520	560	623	644	604	620	693	643	604	665	698
Total (without CO_2 from LUCF)	650	635	621	570	520	560	623	644	604	620	693	643	604	665	698
GREENHOUSE GASES SOURCE AND REMOVALS CATEGORIES	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
	CO_2 equivalents (Gg)														
1. Energy	628	613	598	547	497	537	600	620	580	597	670	620	581	640	673
2. Industrial processes	NO	NO	NO	NO	NO	0.06	0.08	0.39	0.71	1.27	1.85	2.93	3.86	4.70	5.35
3. Use of organic solvents and other products	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4. Agriculture	10.6	10.6	10.6	10.6	10.6	10.6	10.6	10.6	10.6	10.9	10.6	10.1	10.3	10.9	10.6
5. Land-use change and forestry (LUCF)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
6. Waste	11.5	11.7	11.8	11.8	11.9	12.1	12.1	12.1	11.8	10.9	9.39	9.44	9.05	9.53	9.09
7. Other	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

According to Article 3(7) of the Kyoto Protocol, Denmark's and Greenland's base year must be calculated on the basis of emissions in 1990 of the greenhouse gases (carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF_6)) and sources (energy, industry, agriculture, waste) listed in Annex A of the Protocol, although for HFCs, PFCs and SF_6, 1995 can be chosen as the base year, cf. Article 3(8) of the Protocol.

In accordance herewith, Denmark and Greenland has chosen 1995 as the base year for the industrial greenhouse gases (HFCs, PFCs and SF_6). In this connection it should be noted that the collection of data for the inventory of Denmark's emissions of these greenhouse gases started around the date of entry into force of the Climate Convention in 1994. Therefore the emissions inventory for 1995 should be regarded as more certain than the inventory for 1990.

According to the regulations covering implementation of the Protocol, the supplement to the base year mentioned in Article 3(7) of the Kyoto Protocol only covers net emissions from deforestation in 1990, and these may only be added if there were net emissions from the category "land-use change and forestry" (LUCF).

As there was no deforestation in Denmark and Greenland in 1990, the supplement is not relevant neither for Denmark nor Greenland. A calculation shows that deforestation of 3,500 ha forest would correspond to emissions of CO_2 corresponding to 1 per cent of the total net emissions of CO_2 in 1990. Maximum deforestation in Denmark in 1990 was no more than 50 ha, and this figure is negligible in this context. Therefore the supplement is not relevant.

On the basis of the following information:
- Denmark's and Greenland's latest inventory of emissions of the greenhouse gases listed in annex A of the Kyoto Protocol in the period 1990-2004,
- Denmark's and Greenland's choice of 1995 as the base year for industrial greenhouse gases (HFCs, PFCs and SF_6) cf. Article 3(8) of the Kyoto Protocol, and
- that there was no deforestation in Denmark and Greenland in 1990 and therefore no supplement, cf. Article 3(7) of the Kyoto Protocol,

the total emissions in the base year for Denmark and Greenland under the Kyoto Protocol amount to 69,973,617 tonnes CO_2 equivalents and of which the base year for Denmark amounts to 69,323,336 tonnes CO_2-equivalents cf. the table below.

Tonnes CO_2 equivalents	Denmark under the EU	Greenland	Denmark and Greenland
CO_2 (1990)*	52,712,457	625,071	53,337,528
CH_4 (1990)	5,692,000	16,151	5,708,151
N_2O (1990)*	10,593,311	8,998	10,602,309
HFCs (1995)	217,728	25	217,753
PFCs (1995)	502	0	502
SF_6 (1995)	107,338	36	107,374
Base year	**69,323,336**	**650,281**	**69,973,617**

* without LULUCF

1.3 Agreement under Article 4

In 2002, the 15 member states in the EU reached an agreement to fulfil the commitments under Article 3 of the Kyoto Protocol jointly. The secretariat of the United Nations Framework Convention on Climate Change was notified of the terms of the agreement on 31 May 2002 when the EU and the 15 Member States – including Denmark – ratified the Kyoto Protocol.

The agreement is also included in Annex 1 to this report.

1.4 Assigned Amounts 2008-2012

Denmark's reduction commitment under the Kyoto Protocol is related to the EU's total reduction commitment through the Burden Sharing Agreement.

In this connection, Denmark has undertaken a legal commitment to reduce total emissions of greenhouse gases by 21 per cent in the years 2008 to 2012, compared to the base year.

From a base year of 69,323,336 tonnes CO_2 equivalents Denmark's assigned amount under the Burden Sharing Agreement calculated as 79% and multiplied by five amounts to **273,827,177 tonnes CO_2 equivalents** (corresponding to 54,785,435 tonnes CO_2 equivalents per year in 2008-2012).

The Kingdom of Denmark's reduction commitment under the Kyoto Protocol comprises Denmark's 21% reduction commitment under the EU Burden Sharing Agreement and Greenland's 8% reduction commitment as part of the Kingdom's reduction commitment under the Kyoto Protocol due to Greenland not being part of the EU and subsequently not being included in the EU Burden Sharing Agreement.

From a base year of 650,281 tonnes CO_2 equivalents Greenland's contribution - calculated as 92% and multiplied by five - to the Kingdom's total assigned amount under the Kyoto Protocol amounts to 2,991,292 tonnes CO_2 equivalents (corresponding to 598,258 tonnes CO_2 equivalents per year in 2008-2012).

By adding Denmark's assigned amount under the EU Burden Sharing and Greenland's contribution, the Kingdom's total assigned amount under the Kyoto Protocol amounts to **276,818,469 tonnes CO_2 equivalents** (corresponding to 55,363,694 tonnes CO_2 equivalents per year in 2008-2012).

The results are also shown in the table below.

Tonnes CO_2 equivalents	Denmark under the EU	Greenland	Denmark and Greenland
Base year*	**69,323,336**	**650,281**	**69,973,617**
Annual Assigned Amount in %	79%	92%	DK79%+GR92%
Annual Assigned Amount in tonnes	54,765,435	598,258	55,363,694
Total Assigned Amount 2008-12	**273,827,177**	**2,991,292**	**276,818,469**

* without LULUCF

2 Part Two

2.1 COMMITMENT PERIOD RESERVE

Based on the Kingdom's total assigned amount under the Kyoto Protocol, the commitment period reserve for the commitment period 2008-2012 of 90 per cent of assigned amounts can be calculated at **249,136,622 tonnes CO_2 equivalents**.

Since 100% of both the most recently reviewed inventory (inventory year 2003) and the most recently submitted inventory (inventory year 2004 with figures for Greenland updated in November 2006) are higher than 90% of the assigned amount, the 90% rule for the calculation of the commitment period reserve applies.

The results are also shown in the table below.

Tonnes CO_2 equivalents	Denmark under the EU	Greenland	Denmark and Greenland
Total Assigned Amount 2008-12	**273,827,177**	**2,991,293**	**276,818,469**
a. 90% of AA	246,444,459	2,692,163	249,136,622
Most recently reviewed inventory (2003)*	74,007,808	634,000	74,641,808
b. Times 5 (100%)	370,039,040	3,170,000	373,209,040
*Most recently inventory (2004)**	*68,092,442*	*698,276*	*68,790,718*
c. Times 5 (100%)	*340,462,209*	*3,491,379*	*343,953,589*
CPR (lowest of a and b *or c*)	**246,444,459**	**2,692,163**	**249,136,622**

* without LULUCF

2.2 LULUCF - DEFINITIONS

For the estimation of anthropogenic emissions by sources and removals by sinks associated with afforestation, reforestation and deforestation since 1990 under Article 3(3) and forest management under Article 3(4) of the Kyoto Protocol, the following forest definition will be applied:

- Minimum values for tree crown cover: 10 per cent tree crown cover for forests.
- Minimum values for land area: 0.5 ha.
- Minimum value for tree height: trees must be able to reach a minimum height of 5 m in the site.

In addition, the forest area includes temporarily unstocked areas, smaller open areas in the forest needed for management purposes and fire breaks. Forests in national parks, reserves, or areas under special protection are included. Windbreaks and groves covering more than 0.5 ha and with a minimum width of 20 m are also considered as forests. Farmlands, orchards, gardens (houses and summer houses) are NOT included in the forest area.

Afforestation covers new forests established since 1990. Sources of information on afforestation are:

- A forest map for the year 1990, based on NFI[2] monitoring combined with satellite pictures.

- NFI monitoring, with combined evaluations of the age and origin of individual sample spots. For vegetation below 1.3 m, previous use is also indicated. For vegetation above 1.3 m established after 1990, information is recorded about the previous use of the spot.

The Kyoto Protocol assumes human-induced afforestation. For Denmark it is expected that all afforestation is human-induced – either by direct afforestation (with or without subsidies), or by actively choosing not to use the land for purposes preventing forest growth.

2.3 LULUCF - Election of activities

As regards the possibility of including in the first commitment period emissions and removals associated with land use, land-use change and forestry activities under Article 3(4) of the Kyoto Protocol, it has been decided to include emissions and removals from forest management, cropland management and grazing land management.

The national system of emissions inventories will identify land areas associated with the activities under Article 3(4) of the Kyoto Protocol in accordance with definitions, modalities, rules and guidelines relating to land use, land-use change and forestry activities under the protocol by satellite monitoring, use of EU Land Parcel Information System (LPIS), detailed crop information data on field level, soil mapping and sample plots from the national forest inventory (NFI).

Inventories of emissions and removals under Article 3(3) and Article 3(4) will be prepared for each year in the period 2008-2012, and reported annually in 2010-2014 together with the other greenhouse gas inventory information.

2.4 LULUCF - Intention regarding accounting

For each activity under Article 3(3) and Article 3(4) it is the intention to account annually.

2.5 Description of the national system for emissions inventories

The national emissions inventory system has been developed so that from 31 December 2005 it meets the requirements set out in the Kyoto Protocol and the EU Council Decision for a monitoring mechanism. A detailed description of the national emissions inventory system is given below.

2.5.1 Objectives

In pursuance of Article 5(1) of the Kyoto Protocol, the Parties to the Protocol must establish national systems for the calculation of greenhouse gas emissions. The objective of establishing the national systems is to ensure good quality inventories. This is achieved by following the IPCC Guidelines for planning, implementation and execution of the activities connected with the work on the greenhouse gas

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[2] National Forest Inventory

inventories. The national system must also ensure that the inventories are transparent, consistent, comparable, complete and accurate.

2.5.2 Organisation of work etc.

The Danish National Environmental Research Institute (NERI) is responsible for producing the Kingdom of Denmark's greenhouse gas emission inventories and the annual reporting to the UNFCCC. NERI is therefore the contact point for the national system for greenhouse gas inventories under the Kyoto Protocol:

National Environmental Research Institute (NERI)
Frederiksborgvej 399
POB 358
DK-4000 Roskilde
Phone : +45 46 30 12 00
Fax: +45 46 30 11 14
Email: dmu@dmu.dk / jbi@dmu.dk

Furthermore, NERI participates in work under the auspices of the UNFCCC, where guidelines for reporting are discussed and decided upon, as well as participating in the EU monitoring mechanism for inventories of greenhouse gases, where guidelines for reporting to the EU are regulated.

The work on the annual inventories is carried out in cooperation with other Danish ministries, research institutes, organisations and private enterprises. Under the Kyoto Protocol the most important partners for this work are:

The Danish Energy Authority, the Danish Ministry of Transport and Energy:
Annual energy statistics that are compatible with the format used for emission inventories and fuel consumption data for large incineration plants.

The Danish Environmental Protection Agency, the Danish Ministry of the Environment:
Database on waste volumes and emissions for potent greenhouse gases (F gases).

Statistics Denmark, the Danish Ministry of Economic and Business Affairs:
Statistical yearbook, sales statistics for industry, and agricultural statistics.

The Danish Institute of Agricultural Sciences, the Danish Ministry of Food, Agriculture and Fisheries:
Data on use of fertilizer, fodder consumption, and nitrogen emissions from livestock.

The Danish Road Directorate, the Danish Ministry of Transport and Energy:
Number of vehicles grouped by categories corresponding to the EU classifications, kilometres travelled and speeds shown by town, main roads and motorways.

Forest and Landscape Denmark, the Royal Veterinary and Agriculture University (KVL), the Ministry of Science, Technology, and Innovation:
Background data for forests and removals of CO_2 by forests.

The Civil Aviation Administration, the Danish Ministry of Transport and Energy:
Aircraft data (aircraft types and flight routes) for all flight departures and arrivals in Danish airports.

DSB, the Danish Ministry of Transport and Energy:
Fuel related emission factors for diesel locomotives.

Danish enterprises:
Environmental accounts and other information.

The Greenland Home Rule, Department for Environment and Nature:
Data for waste volumes and emissions for potent greenhouse gases (F gases).

Statistics Greenland:
Statistical yearbook.

Greenlandic enterprises:
Environmental accounts and other information.

These partners provide a range of data that are needed to produce the inventory. NERI is therefore in the process of drawing up formal agreements that will ensure that NERI receives the necessary data on time.

2.5.3 Calculation methods

The Danish emissions inventory is based on the IPCC guidelines for calculation of greenhouse gas emissions (the Revised 1996 Intergovernmental Panel on Climate Change (IPCC) Guidelines for National Greenhouse Gas Inventories (Houghton et al., 1997) and the Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories (Penman et al., 2000)) and the European CORINAIR (COoRdination of INformation on AIR emissions) program for calculation of national emissions. Generally, emissions are calculated by multiplying the activity data (e.g. fuel consumption, number of animals or vehicles) by an emission factor (e.g. the mass of material emitted per unit of energy, per animal or per vehicle). Activity data are mainly based on official statistics. The emission factors are either national values or values recommended in the IPCC guidelines.

2.5.4 Important sources

Choice of calculation method for the individual sources depends among other things on how significant the source is. The sources that together accounted for 95 per cent of greenhouse gas emissions in 2003 or accounted for 95 per cent of the change in emission levels from 1990 to the most recently calculated year (2003) are defined as significant sources according to the IPCC guidelines. An analysis of the Danish sources shows that 21 sources account for 95 per cent of total greenhouse gas emissions and that the three largest sources - that together account for 62 per cent - are CO_2 from the combustion of coal at stationary incineration plants, CO_2 from road transport and CO_2 from combustion of natural gas at stationary incineration plants.

2.5.5 Procedure for recalculation

At the same time as the annual calculation of emissions for a new year takes place, any necessary recalculations of emissions inventories from previous years are also carried out. Recalculations are made if errors or oversights are found or if better

knowledge becomes available. If better knowledge becomes available, statistical data, improvements of method, activity data or emission factors are updated according to new knowledge and research. In order to ensure consistent emission inventories, recalculations will be carried out on the whole time series, as far as circumstances permit.

2.5.6 Uncertainty

Uncertainty in the greenhouse gas inventories is calculated as recommended in the IPCC guidelines and covers 93 per cent of total Danish greenhouse gas (GHG) emissions. The result of the calculations shows that total GHG emissions were calculated to have an uncertainty of 46 per cent, and the increase in GHG emissions since 1990 was calculated to be 4.8 per cent ± 19 per cent. Uncertainty is greatest for N_2O emissions from agricultural land, whilst the uncertainty for CO_2 emissions from stationary incineration plants is only 8 per cent, and the uncertainty for the development is 1.8 per cent.

For CO_2 removal in forests, uncertainties are currently only based on estimates. The overall uncertainty for binding of carbon resulting from afforestation, is calculated at 91 per cent for reports based on the Inventory of Forests 2000 (Skovtælling 2000). The main contributors to the high overall uncertainty for afforestation are expansion factors for calculation of the total biomass and calculation of area. Similarly, the uncertainty for forests from before 1990 is calculated at 44 per cent based on the Inventory of Forests 2000.

With the new National Forest Inventory (NFI), contributing with data from 2007, uncertainty is expected to drop considerably. The uncertainty for binding of carbon is expected to be reduced to 27 per cent, and uncertainty for forests from before 1990 is expected to be reduced to 15 per cent. In addition to improved area and wood mass estimates, reduced uncertainty is also due to the fact that it is expected that certain biomass expansion functions are applicable under Danish conditions.

2.5.7 Quality assurance and control

As part of the national system, NERI is drawing up a manual to use in quality assurance and quality control of the emissions inventories. The manual contains precise and detailed guidelines on how to assure and control quality of the inventories. The quality plan described in the manual is based on the IPCC guidelines and ISO 9000, 9001, 9004 and 10005 standards. The objective of the quality planning is to ensure the quality of the inventories in a manner that optimises resources. The quality control includes routine checks of data correctness and completeness as well as ensuring that any possible errors and deficiencies are identified and corrected. All calculation methods are documented and all material concerning data, methods and recalculations is filed.

Reports are written for all sources of emissions that describe in detail and document the data and calculation methods used. These reports are evaluated by persons external to NERI who are experts in the area in question, but not directly involved in the inventory work.

In addition, a project has been started in which the Danish calculation methods, emission factors and uncertainties are compared with those of other countries, in order to further verify the correctness of the inventories.

2.5.8 Annual reporting

NERI produces an annual report (National Inventory Report) for the Climate Convention in which the results of the calculations are presented and the background data, calculation methods, plan for quality assurance and control, uncertainty and recalculations are described and documented. At the request of the Climate Convention, the report is evaluated each year by international experts. During the last few years, improvements have been made in the inventories' quality and documentation, as a result of the quality assurance and control procedures and the evaluations of national and international experts.

2.6 Description of the National Emissions Trading Registry

Denmark's National Emissions Trading Registry was opened on 1 January 2005. The registry is designed to manage holdings and transactions in emissions quotas allocated to enterprises covered by the EU Emissions Trading Directive. The Registry can also be used to manage holdings and transactions in EU allowances and Kyoto units under the first commitment period of the Kyoto Protocol.

In the following, the National Emissions Trading Registry is described in more detail. Additional information is available in the Registry Initialization Specifications included in Annex 2.

2.6.1 Information on the registry administrator

Danish Environmental Protection Agency
Strandgade 29
DK-1401 Copenhagen K
Phone : +45 32 66 01 60
Fax: +45 32 66 02 01
Email: mst@mst.dk

2.6.2 Cooperation with other countries concerning operation of the registry

Denmark does not cooperate with other countries concerning the administration or operation of the Danish CO_2 emissions trading registry.

2.6.3 Database structure

The database structure of the Danish registry system is shown in Annex 3.

2.6.4 Standards for data exchange

The Danish registry system follows the UN Data Exchange Standards 7.

2.6.5 Procedures for administration and operation of the Emissions Trading Registry

The procedures are described in the Commission regulation (EC) no. 2216/2004 on a standardised and secure system of registries adopted pursuant to the Parliament

and Council directive 2003/87/EC and the Parliament and Council decision 280/2004/EC.

Denmark is in compliance with the procedures stated in the regulation.

2.6.6 Safety standards

The registry is safeguarded with a FireWall based on 2 Cisco FireWall Software Modules (FWSM) in a Catalyst 6507.

There is dual access from all servers to the Internet, ensuring that a single error will not cause disconnections.

The RILO ports on the servers are connected to the internal networks, making it possible to have remote control of the machines via a secure net. Software is updated as required.

The entire system is monitored regularly and all security violations are recorded and corrected as soon as possible.

As regards the network, administrative access to the machines from the Ministry's internal network is secure.

The registry can only be accessed via the programme through WEB-Services. These WEB-Services can be accessed either through an open part (the initial communication) or a secure part (the register software application itself).The secure part of the system is based on SSL. Similarly the system is designed so as to make it impossible to use the same password more than once in the system.

The Registry's production system consists of 2 servers, a WEB server and a database server. The servers are configured so that a single disc error will not stop the system. Furthermore as regards the disc, the DB server is set up so that the transaction log and the database are physically located on separate discs.

Everyone who registers as users of the registry receives their own username and password and is instructed to ensure that these remain confidential. If a user discovers that an unauthorized person has gained access to his/her password, the password must be changed in the registry immediately and the registry administration must be notified.

The registry automatically disconnects when access has been inactive for some time. You must log on again using your username and password.

The safety standards are further described in Annex 2.

2.6.7 Information available to the public

Only the information stated in Article 9 and the corresponding appendices in the Commission regulation (EC) no. 2216/2004 on a standardised and secure system of registries adopted pursuant to the Parliament and Council directive 2003/87/EC and the Parliament and Council decision 280/2004/EC is available to the public.

2.6.8 Internet address for the registry

http://dketreu.mst.dk/

2.6.9 Protection, maintenance and recreation of data

The procedures for protection, maintenance and recreation of data are described in detail in Annex 2.

2.6.10 Test results

The most recent test result available obtained in the European Commission's test of the Danish registry system, is reproduced in Annex 2.

Annex 1: Agreement under Article 4

2002/358/EC: Council Decision of 25 April 2002 concerning the approval, on behalf of the European Community, of the Kyoto Protocol to the United Nations Framework Convention on Climate Change and the joint fulfilment of commitments thereunder

Official Journal L 130 , 15/05/2002 P. 0001 - 0003

Council Decision

of 25 April 2002

concerning the approval, on behalf of the European Community, of the Kyoto Protocol to the United Nations Framework Convention on Climate Change and the joint fulfilment of commitments thereunder

(2002/358/CE)

THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 175(1) in conjunction with Article 300(2), first sentence of the first subparagraph, and Article 300(3), first subparagraph, thereof,

Having regard to the proposal from the Commission(1),

Having regard to the Opinion of the European Parliament(2),

Whereas:

(1) The ultimate objective of the United Nations Framework Convention on Climate Change ("the Convention"), which was approved on behalf of the Community by Council Decision 94/69/EC of 15 December 1993 concerning the conclusion of the United Nations Framework Convention on Climate Change(3), is to achieve stabilisation of greenhouse-gas concentrations in the atmosphere at a level which prevents dangerous anthropogenic interference with the climate system.

(2) The Conference of the Parties to the Convention, at its first session, concluded that the commitment by developed countries to aim at returning, individually or jointly, their emissions of carbon dioxide and other greenhouse gases not controlled by the Montreal Protocol to the Convention for the Protection of the Ozone Layer to 1990 levels by the year 2000 was inadequate for achieving the Convention's long-term objective of preventing dangerous anthropogenic interference with the climate system. The Conference further agreed to begin a process to enable appropriate action to be taken for the period beyond 2000, through the adoption of a protocol or another legal instrument(4).

(3) This process resulted in the adoption on 11 December 1997 of the Kyoto Protocol to the United Nations Framework Convention on Climate Change ("the Protocol")(5).

(4) The Conference of the Parties to the Convention, at its fourth session, decided to adopt the Buenos Aires Plan of Action, to reach agreement on the implementation of key elements of the Protocol at the sixth session of the Conference of the Parties(6).

(5) The core elements for the implementation of the Buenos Aires Plan of Action were agreed upon by consensus by the Conference of the Parties at its resumed sixth session in Bonn from 19 to 27 July 2001(7).

(6) A range of decisions giving effect to the Bonn Agreements were adopted by consensus by the Conference of the Parties at its seventh session in Marrakech from 29 October to 10 November 2001(8).

(7) The Protocol, under Article 24, is open for ratification, acceptance or approval by States and by regional economic integration organisations that have signed it.

(8) The Protocol, under Article 4, provides for Parties to fulfil their commitments under Article 3 jointly, acting in the framework of and together with a regional economic integration organisation.

(9) When the Protocol was signed in New York on 29 April 1998, the Community declared that it and its Member States would fulfil their respective commitments under Article 3(1) of the Protocol jointly in accordance with Article 4 thereof.

(10) In deciding to fulfil their commitments jointly in accordance with article 4 of the Kyoto Protocol, the Community and the Member States are jointly responsible, under paragraph 6 of that article and in accordance with article 24(2) of the Protocol, for the fulfilment by the Community of its quantified emission reduction commitment under Article 3(1) of the Protocol. Consequently, and in accordance with Article 10 of the Treaty establishing the European Community, Member States individually and collectively have the obligation to take all appropriate measures, whether general or particular, to ensure fulfilment of the obligations resulting from action taken by the institutions of the Community, including the Community's quantified emission reduction commitment under the Protocol, to facilitate the achievement of this commitment and to abstain from any measure that could jeopardise the attainment of this commitment.

(11) The legal base of any further Decision in relation to the approval by the Community of future commitments in respect of emission reductions will be determined by the content and effect of that Decision.

(12) The Council agreed upon the contributions of each Member State to the overall Community reduction commitment in the Council conclusions of 16 June 1998(9). Certain Member States expressed assumptions concerning base year emissions and common and coordinated policies and measures. The contributions are differentiated to take account i.a. of expectations for economic growth, the energy mix and the industrial structure of the respective Member State. The Council further agreed that the terms of the agreement would be included in the Council Decision on the approval of the Protocol by the Community. Article 4(2) of the Protocol requires the Community and its Member States to notify the Secretariat, established by Article 8 of the Convention, of the terms of this agreement on the date of deposit of their instruments of ratification or approval. The Community and its Member States have an obligation to take measures in order to enable the Community to fulfil its obligations under the Protocol without prejudice to the responsibility of each Member State towards the Community and other Member States to fulfilling its own commitments.

(13) The base-year emissions of the Community and its Member States will not be established definitively before the entry into force of the Protocol. Once these base-year emissions are definitively established and at the latest before the start of the commitment period, the Community and its Member States shall determine these emission levels in terms of tonnes of carbon dioxide equivalent in accordance with the procedure referred to in Article 8 of Council Decision 93/389/EEC of 24 June 1993 for a monitoring mechanism of Community CO_2 and other greenhouse gas emissions(10).

(14) The Gothenburg European Council on 15 and 16 June 2001 reaffirmed the determination of the Community and the Member States to meet their commitments under the Protocol, and stated that the Commission will prepare a proposal for ratification before the end of 2001 making it possible for the Community and its Member States to fulfil their commitment rapidly to ratify the Protocol.

(15) The Laeken European Council on 14 and 15 December 2001 confirmed the Union's determination to honour its commitment under the Kyoto Protocol and its desire that the Protocol should come into force before the Johannesburg World Summit on Sustainable Development, 26 August to 4 September 2002.

(16) The measures necessary for the implementation of this Decision should be adopted in accordance with Council Decision 1999/468/EC of 28 June 1999 laying down the procedures for the exercise of implementing powers conferred on the Commission(11),

HAS ADOPTED THIS DECISION:

Article 1

The Kyoto Protocol to the United Nations Framework Convention on Climate Change ("the Protocol") signed on 29 April 1998 in New York is hereby approved on behalf of the European Community.

The text of the Protocol is set out in Annex I.

Article 2

The European Community and its Member States shall fulfil their commitments under Article 3(1) of the Protocol jointly, in accordance with the provisions of Article 4 thereof, and with full regard to the provisions of Article 10 of the Treaty establishing the European Community.

The quantified emission limitation and reduction commitments agreed by the European Community and its Member States for the purpose of determining the respective emission levels allocated to each of them for the first quantified emission limitation and reduction commitment period, from 2008 to 2012, are set out in Annex II.

The European Community and its Member States shall take the necessary measures to comply with the emission levels set out in Annex II, as determined in accordance with Article 3 of this Decision.

Article 3

The Commission shall, at the latest by 31 December 2006 and in accordance with the procedure referred to in Article 4(2) of this Decision, determine the respective emission levels allocated to the European Community and to each Member State in terms of tonnes of carbon dioxide equivalent following the establishment of definitive base-year emission figures and on the basis of the quantified emission limitation or reduction commitments set out in Annex II, taking into account the methodologies for estimating anthropogenic emissions by sources and removals by sinks referred to in Article 5(2) of the Protocol and the modalities for the calculation of assigned amount pursuant to Article 3(7) and (8) of the Protocol.

The assigned amount of the European Community and of each Member State shall be equal to its respective emission level determined in accordance with this Article.

Article 4

1. The Commission shall be assisted by the committee instituted by Article 8 of Decision 93/389/EEC.

2. Where reference is made to this paragraph, Articles 5 and 7 of Decision 1999/468/EC shall apply.

The period laid down in Article 5(6) of Decision 1999/468/EC shall be set at three months.

3. The Committee shall adopt its rules of procedure.

Article 5

1. The President of the Council is hereby authorised to designate the person or persons empowered to notify, on behalf of the European Community, this Decision to the Secretariat of the United Nations Framework Convention on Climate Change in accordance with Article 4(2) of the Protocol.

2. The President of the Council is hereby authorised to designate the person or persons empowered to deposit, on the same date as the notification referred to in paragraph 1, the instrument of approval with the Secretary-General of the United Nations in accordance with Article 24(1) of the Protocol, in order to express the consent of the Community to be bound.

3. The President of the Council is hereby authorised to designate the person or persons empowered to deposit, on the same date as the notification referred to in paragraph 1, the declaration of competence set out in Annex III, according to the provisions of Article 24(3) of the Protocol.

Article 6

1. When depositing their instruments of ratification or approval of the Protocol, Member States shall notify, at the same time and on their own behalf, this Decision to the Secretariat of the United Nations Framework Convention on Climate Change in accordance with Article 4(2) of the Protocol.

2. Member States shall endeavour to take the necessary steps with a view to depositing their instruments of ratification or approval simultaneously with those of the European Community and the other Member States and as far as possible not later than 1 June 2002.

3. Member States shall inform the Commission not later than 1 April 2002 of their decisions to ratify or to approve the Protocol or, according to the circumstances, of the probable date of completion of the requisite procedures. The Commission shall, in cooperation with the Member States, arrange a date for depositing the instruments of ratification or approval simultaneously.

Article 7

This Decision is addressed to the Member States.

Done at Luxembourg, 25 April 2002.

For the Council

The President

M. Rajoy Brey

(1) OJ C 75 E, 26.3.2002, p. 17.

(2) Opinion delivered on 6 February 2002 (not yet published in the Official Journal).

(3) OJ L 33, 7.2.1994, p. 11.

(4) Decision 1/CP.1: "The Berlin Mandate: Review of the adequacy of Article 4, paragraph 2(a) and (b), of the Convention, including proposals related to a protocol and decisions on follow-up".

(5) Decision 1/CP.3: "Adoption of the Kyoto Protocol to the United Nations Framework Convention on Climate Change".

(6) Decision I/CP.4: "The Buenos Aires Plan of Action".

(7) Decision 5/CP.6: "Implementation of the Buenos Aires Plan of Action".

(8) Decisions 2-24/CP.7: "The Marrakech Accords".

(9) Doc. 9702/98 of 19 June 1998 of the Council of the European Union reflecting the outcome of proceedings of the Environment Council of 16-17 June 1998, Annex I.

(10) OJ L 167, 9.7.1993, p. 31. Decision as last amended by Decision 1999/296/EC (OJ L 117, 5.5.1999, p. 35).

(11) OJ L 184, 17.7.1999, p. 23.

Annex 2:   Registry Initialization Specifications

Staff identification and planning

Staff and address

Emissions Trading Registry
Danish Ministry of the Environment
Environmental Protection Agency
Strandgade 29
1401 København K
Phone: +45 32 66 03 40
Email: kvoteregister@mst.dk

Registry Administrator –	Danish Environmental Protection Agency Strandgade 29 1401 København K Phone: +45 32 66 01 00 Email: mst@mst.dk
Registry Manager -	Mrs. Susanne Bødtker Petersen Phone: +45 32 66 03 38 Email: sbp@mst.dk / kvoteregister@mst.dk
Registry Staff -	Mr. John Egholm Phone: +45 32 66 02 38 Email: jeje@mst.dk Mr. Karim Arfaoui Phone: +45 32 66 03 39 Email: karar@mst.dk
Host -	Center for Koncernforvaltning Mr. Carsten Hougs Lind Rentemestervej 8 2400 København NV. Phone: +45 72 30 70 93 Email: chl@Center for Koncernforvaltning.dk

Initialization Schedule

Completion dates of each step of the initialization process

The initial testplan for the Danish Emission Trading Registry (No steps of the initialisation have been completed yet):

- Mid January 2007: Connectivitytest

- May 2007: Functional test

- May 2007: Confirmation of Danish governmental accounts for Cancellation, Replacement and Retirement for first Commitment Period to be submitted to the ITL

<u>Documentation</u>

The following sections are describing the hosting responsibility and different plan setups of the Danish Emissions Trading Registry. Denmark has choosen to outsource the hosting to Center for Koncernforvaltning, whereby most primary individuals and primary individual's backups are representatives from the host.

DATABASE AND APPLICATION BACKUP

Planning of the Danish Backup plan

Staff and responsibility

The hardware and software support team consists of 2 persons from Center for Koncernforvaltning:
- Lars Lyager Olsen
- Preben G. Petersen

The hardware and software support team is organized in such a way that Lars Lyager Olsen is the primary individual and Preben G. Petersen is the primary individual's backup.

Backup schedule and procedures
The SQL maintenance plan is constructed so that daily backup of databases and backup of transactionl ogs on a 4 hourly schedule is carried out. The SQL backups are kept 8 days.
Furthermore at daily differential backup of file system including SQL backup files of databases and transaction logs is set up.
On a weekly basis a total backup of file system including SQL backup files of databases and transaction logs is carried out. The daily and weekly file backups are saved two months. Hereafter a weekly total file backup is saved 2 years separated into months. After 2 years a yearly total file backup is saved for 15 years.

Hardware, Hardware location, software and scope of backup
The hardware used for backup is QualStar Tape Library with LTO3 tape drives. The backup software used is Veritas Netbackup v. 6.0 MP3. All the primary backup hardware is located at:

Center for Koncernforvaltning
Rentemestervej 8
DK-2400 København NV

The backup scope is a total file backup including system state backup.

Planning of the different points in the recovery plan

Offsite, backup and storage facility
The offsite facility's running system for backup and storage is located at the TDC hosting centre at:

Rosenvængets Alle 9-13
DK-2100 København Ø

The Offsite hosting facilities are located on two addresses, the first one at:

Center for Koncernforvaltning
Rentemestervej 8
DK-2400 København NV

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The second location for the offsite hosting facilities is found at:

Skov- og Naturstyrelsen
Haraldsgade 53
DK-2100 København Ø

No dedicated hardware is available at offsite facilities, but the hardware is available in general, thus backup and storage is available at offsite facilities.

Minimum requirements for temporary hosting of the Danish Registry in disaster situations
In case of disaster any Intel server hardware less than 3 years old can be used as a host. The needed system software is Windows 2003 SP1 including the latest security patches, Windows SQL 2000 Server SP4 and the at the time current version of the Emissions Trading Registry software.

Staff and responsibility
Hardware and software support team:
- Carsten Hougs Lind, Center for Koncernforvaltning – application software
- Allan Kristensen, Center for Koncernforvaltning – application software
- Alex Mokhtari, Center for Koncernforvaltning – DBA
- Preben G. Petersen, Center for Koncernforvaltning – hardware

Primary individual and the primary individual's backup
- Primary: Carsten Hougs Lind, Center for Koncernforvaltning
- Primary individual's backup: Allan Kristensen, Center for Koncernforvaltning

Roll back procedures
Procedures for getting back to the old condition the system was in before disaster incident:
Scenario 1: Restoration of file system and/or database if hardware is intact.
Scenario 2: Reinstallation of system software if system software is down followed by a restore of file system and database.
Scenario 3: Procurement of new hardware, installation of system software and restoration of file system and database if hardware is down.

Internal notification plan
Within opening hours (daily 08:30-17:00 GMT+1): the Help desk receives an alarm from the surveillance system or from a user. Help desk contacts a person available in the support team to take action.
Outside opening hours: The person on duty either takes action himself or contacts any member of the support team to take action if necessary.

Storage of documentation, procedure manuals and paper based forms
All documentation, procedures and forms are digitalized and are stored on Center for Koncernforvaltning's intranet.

Disaster Recovery Plan

Notification plan

In case of a disaster, Center for Koncernforvaltning will immediately (within one hour from the discovery of the disaster) contact the registry administrator, Eva Jensen phone. +45 25 44 12 28, who will immediately get hold on the registry manager or one of the registry staff.

The Registry manager/staff will within two hours notify the registry administrator of the C/ITL by telephone and e-mail.

As soon as the hardware and software are re-installed with the latest back-up, the registry manager/staff will initiate the updating of the database by requesting a reconciliation from the C/ITL.

If further updating of the database has to be done by manual interventions, this will be agreed with the CITL administrator. All parties involved will be notified after agreement with the C/ITL.

After performing the needed manual interventions, the C/ITL is requested to initiate a new reconciliation.

The Registry manager/staff will notify C/ITL and Center for Koncernforvaltning (the host) when everything is recovered.

A newsletter will be sent to the users of the Danish ETR the following working day.

Strategy and plan for testing the Disaster Recovery Plan on regular basis

We plan to check the safeguarding by making a break-down test once a year. This will be arranged and made in full co-operation and co-ordination with the central registry administrator

SECURITY PLAN

Making sure the security meets the Data Exchange Standards

Server security
To make sure the user passwords and ID's are secure the Windows authentication programme Kerberos is utilized. The physical security and protection of the servers and applications is being handled by the Danish company TDC, which apart from their state of the art security system of their premises has the servers locked up in racks in their hosting centre. When access has been made to the premises coded keycards secure the restricted hosting centre.

User authentication security
In the Danish Emmisions Trading Registry a number of measures are taken to make sure that the security for the account holders meets the Data Exchange Standards for Registry Systems under the Kyoto Protocol.
As a first security measure, password requirements for each of registered users of the Danish Emissions Trading Registry, is build into the Registry software. The Registry software requires at least an 8 character long password, which has to be a mix of both alpha and numeric characters. Furthermore the chosen password can not be any of the user's 10 previous passwords.
When the Registry is handling requests by Registry users the mail is used as a validator for the user and if the Registry staff finds it necessary they can request more person validation data, such as memorable date and passport number or civil registration number.
Along with the above password requirements the software also requires the Registry users to change their passwords every three months. With regards to maintenance of user ID's, these remain the same from the user registers with the Danish Emmisions Trading Registry till the person retires from the Registry. Furthermore the users also has the possibility of changing their user ID.

Session security
The session security within the Emissions Trading Registry software is handled by SSL encryption when logging on to the system. Transfer of data to and from the registry is also handled by SSL encryption.
The Danish Environmental Protection Agyncy is responsible for the security of the registry this includes network, database, user ID and password security and the physical security of the servers.

APPLICATION LOGGING DOCUMENTATION

Summary of the Danish Registry's capability of maintaining database logs and activity logs

Database logging and activity logging
To survey the transactions in the registry software Microsoft SQL transaction logging is utilized. With regards to activity logging (logging of general usage and unauthorized attempts to log on to server), Microsoft Server 2003 security logging is being utilized.

All database and activity information logged is backed up, but is not shipped to a remote server.

Procedures for validating the synchronization of times in the Danish Register and the ITL

To make sure the Danish Emissions Trading Registry software is synchronized with the C/ITL the discrepancy is checked every week. This is check is done in the registry software by the registry staff. If the discrepancy is exceeding 60 seconds the servertime in the registry is set by the host.

Procedures for changing software version including the testing procedures before the new version goes online

The Danish Emission Trading Registry consists of a production environment and a test environment. The Production environment is connected to the C/ITL production and the test environment is connected to the C/ITL preproduction.

Procedures for updating the production environment
Planned changes/updates of the registry software at the production environment will be notified to the Registry Administrator of the C/ITL by e-mail 1 month in advance at the latest.

Update of the software will only take place after testing as described in the following section.

Before the update, all connections to and from the C/ITL will be disconnected in order to avoid the update being interfered by transactions.

Before the update, the following information is noted in order to check if anything has been changed in the Database afterwards:
- Number of Legal entities
- Number of accounts
- Latest account number
- Number of units

Immediately before the update a full back-up of the system and database is made, in order to be able to re-install if a problem occurs during the update.

After updating the software, access to the registry from the www, the number of Legal entities, number of accounts, latest account number, and number of units are checked. If any discrepancies occur, the reason and a solution have to be found before the connection to the C/ITL is re-established.

When the connection to the C/ITL is re-established the C/ITL is requested to initiate reconciliation. Any discrepancies have to be solved in cooperation with the C/ITL

After successful reconciliation, the registry administrator performs a transaction between two party holding accounts in order to make sure, the registry is functioning correctly. The C/ITL is notified by e-mail when the update is successfully finalised.

After the finalization a back-up of the system and database is made.

Testing prior to updating the production environment
All tests will be performed at the preproduction environment. For each new software version a test plan will be developed. The test plan will consist of following elements described in the following sections.

<u>All new software versions</u>
All new software versions will be installed at the test environment. Tests will be performed by the Danish Emissions Registry team. Parts of the test, where ITL or CITL participation is needed (for instance reconciliation etc), will be coordinated with the C/ITL.

First of all the CITL test plan and the ITL test plan will be performed in order to check that all basic functionalities are still functioning. The results will be recorded in the test report.

If any of the basic functionalities fail in the test, this will be reported to the developer. The software will not be installed at the production environment until it passes all basic tests.

New software versions with minor changes
If a new software version only consists of minor changes (for instance small enhancements of existing functionalities), only the functionalities that have been changed will be thoroughly tested, besides the basic testing described above.

If the software fails the test, it will be reported to the developer. The Registry Administrator will decide whether the new software version should be installed at the production environment or whether the error should be corrected before the software is installed at the production environment. The decision must be based on the severity of the error. No errors which could breach the basic functionalities of the registry will be accepted.

New software versions with major changes and complete new functionalities
Besides passing the basic testing described earlier, each of these new software versions has to have all functionalities thoroughly tested in order to be sure no impacts on existing functionalities have occurred due to development of the new functionalities.
If the software fails the test, it will be reported to the developer. The Registry Administrator will decide whether the new software version should be installed at the production environment or whether the error should be corrected before the software is installed at the production environment. The decision must be based on the severity of the error and no errors which could breach the basic functionalities of the registry will be accepted.

TEST PLAN AND TEST REPORT

Plan to ensure that the registry has performed basic testing and is capable of participating in tests outlined in DES Annex H. This is required to be able to submit transactions to the ITL.

Description of Test Cases and the Regression Test Results of the Greta Registry Software from Siemens is included in the Appendix.

OPERATIONAL PLAN

Plan for an effective running of the Danish Registry with emphasis on the different requirements of the DES and the continued upholding of these requirements

Daily management
The daily management of the registry wil be handeled by two fulltime and one parttime registry managers. Everything concerning management of IT is outsourced to the hosting center "Center for Korcernforvaltning", who manages all IT for the Ministry of the Environment.

A hotline is open at all Danish working days from 9.00 to 13.00 (GMT+1). The hotline takes care of all enquiries from C/ITL and/or private account holders in the Danish registry.

All functionalities and requirements for the Registry manager are described in detail in an internal procedure. This document includes all deadlines for C/ITL and all relevant information. It functions as a complete manual for managing the registry. The document is constantly being updated and it is only accessible in Danish.

A record of all changes, transactions, manual interventions etc. made by the registry managers are documented and filed.

Plan for training of staff

Every new member of the registry team will receive a 2 day training course arranged by the experienced members of the staff. The training includes basic knowledge and functionality of the registry software, national and international legislation, Kyoto issues and internal procedures for the daily management of the registry.

The responsibilities for new staff will be expanded due to the development of their skills and the understanding of the registry system.

Appendix to Annex 2

SIEMENS

Regression Test Cases:

1. Register Operator Holding Account

Test Case ID	Test Case Description
ITS_CITL	New users need to register themselves as an operator by clicking on the appropriate link. This will bring up a registration form in which the details of the user can be entered.
Pre-Condition	Ensure Valid Permit ID is entered.
Test Script Name	**Register Operator**
Input	Select 'Operator Holding Account' from main menu Select 'Next' to submit operator holding account application Enter the 'Organizational Details' Enter 'Account Name' Enter 'Primary Account Representative' Enter 'Secondary Account Representative' Enter 'Security Details' Enter Permit Details Select I Accept from Additional Information Click Apply.
Expected Output	On clicking apply button new operator holding account should be created successfully. There is nothing to be entered but do make a note of the primary and secondary user ids, which should be needed to login to the system with access to the accounts just created. Passwords will be sent out when Registry Administrators has approved the account.
Actual Result	**New Operator Holding Account is registered successfully. The Registry Administrators approves the account and the password is sent to the users.**

2. Register Verifier

Test Case ID	Test Case Description
ITS_ACC	New users need to register themselves as a verifier by clicking on the appropriate link. This will bring up a registration form in which the details of the user can be entered.
Pre-Condition	An operator can only appoint a verifier that has already been created and approved. Enter appropriate emissions for both installations for the year 2006.
Test Script Name	**Verifier Registration**
Input	Logon as eta01 and approve the verifier registration Appoint the newly approved verifier for Operators 1 and 2 Select 'Propose Emissions' from 'Compliance' menu.
Expected Output	The user should be able register a verifier successfully. There is nothing to be entered but do make a note of verifier user ids, which should be needed to login to the system with access to the accounts just created. Passwords will be sent out when Registry Administrators has approved the account.
Actual Result	**New Verifier Account is registered successfully. The**

	Registry Administrators approves the account and the password is sent to the users.

3. Register Personal Holding Account

Test Case ID	Test Case Description
ITS_CITL	New users need to register themselves as an individual by clicking on the appropriate link. This will bring up a registration form in which the details of the user can be entered.
Pre-Condition	Ensure Valid Permit ID is entered.
Test Script Name	**Register Personal Holding Account -**
Input	Select 'Personal Holding Account' from main menu Select 'Next' to submit personal holding account application Enter the 'Account Details' Check 'Account Assign Group' Enter 'Primary Account Representative' Enter 'Secondary Account Representative' Enter 'Security Details' Select I Accept from Additional Information Click Apply.
Expected Output	A new personal holding account is created successfully. There is nothing to be entered but do make a note of the user id, which should be needed to login to the system with access to the accounts just created. Passwords will be sent out when Registry Administrators has approved the account.
Actual Result	**New Person Holding Account is registered successfully. The Registry Administrators approves the account and the password is sent to the users.**

4. Register an Organization

Test Case ID	Test Case Description
ITS_CITL	New users need to register themselves as an Organization by clicking on the appropriate link. This will bring up a registration form in which the details of the user can be entered.
Pre-Condition	
Test Script Name	**Organization Registration**
Input	Select 'External AAR' from main menu Select 'Next' to submit Organization Details Enter 'Organization Details' Enter Account Details Enter 'Primary Account Representative' Enter 'Secondary Account Representative' Enter 'Security Details' Click on I accept the Terms and Conditions Click Apply
Expected Output	A new user account should be successfully proposed. There is nothing to be entered but do make a note of user id, which should be needed to login to the system with access to the accounts just created. Passwords will be sent out when Registry Administrators has approved the account.
Actual Result	**New Organization Holding Account is registered successfully. The Registry Administrators approves the account and the password is sent to the users.**

5. Register an AAR

Test Case ID	Test Case Description
ITS_CITL	New users need to register themselves as an Additional Authorized Representatives by clicking on the appropriate link. This will bring up a registration form in which the details of the user can be entered.
Pre-Condition	
Test Script Name	**AAR Registration**
Input	Select 'External AAR' from main menu Select 'Next' to submit AAR Organization Application Enter 'Organization Details' Enter 'Primary Account Representative' Enter 'Security Details' Click on I accept the Terms and Conditions Click Apply
Expected Output	A new user account should be successfully proposed. There is nothing to be entered but do make a note of the user id, which should be needed to login to the system with access to the accounts just created. Passwords will be sent out when Registry Administrators has approved the account.
Actual Result	**New AAR Account is registered successfully. The Registry Administrators approves the account and the password is sent to the users.**

6. Secure Homepage

Test Case ID	Test Case Description
ITS_CITL	The work queue of the Registry Administrator is displayed on the entry to the system. The RA will open work queue page to approve the applications.
Pre-Condition	Registry Administrators can only approve the applications.
Test Script Name	**Secure Homepage -**
Test Script Name	
Input	Select Work Queue from Secure Home Page Clicking the pencil icon allows the user to view more details of the entry to approve or reject it. Click Approve
Expected Output	On clicking the approve button the application is been approved by the Registry Administrators.
Actual Result	**The Registry Administrators approves the work queue.**

7. Open New Account

Test Case ID	Test Case Description
ITS_MA	The following accounts should be opened. Party Holding Account Retirement Account for Commitment Period 0 Retirement Account for Commitment Period 1 Retirement Account for Commitment Period 0 Retirement Account for Commitment Period 1
Pre-Condition	Legal Entity to be selected as appropriate.
Test Script Name	**Open New Account**

Input	Select 'Open New Account' from Manage Accounts.
	Select 'Account Type', enter account name, reason for opening account. Select Primary Account Representative and Secondary Account Representative. Click Open account.
Expected Output	All accounts will be held on the Registry Administrator's work queue for approval. All accounts have been approved and gave status 'Active'.
Actual Result	**New Account is opened and the Registry Administrators approve the account and the password is sent to the users.**

8. Upload Nap Data

Test Case ID	Test Case Description
ITS_AD	Select Upload Nap Data from Admin Functions.
	Select 'Open New Account' from Manage Accounts
	Select the legal entity i.e. two newly created operators.
	Open a Person Holding Account for each of the operators.
Pre-Condition	Please be sure that the NAP spreadsheet file for period 0 has been copied into the temporary table by your SQL administrator via a backend DTS import.
	Ensure all accounts have a status of 'Active'.
	All accounts will be held on the registry administrator's work queue for approval.
Test Script Name	**Upload NAP Data**
Input	**Step One- Import the spreadsheet data**
	Unclick 'Account Approval' check box. DB reset and Bulk upload/logout.
	Step Two- Password generation
	Password Generation/e-mail sending to all users.
	Step Three- Update the number formats
	Update the number formats.
	Step Four - Propose Bulk Accounts to CITL
	Submit account details of all new operators holding for CITL approval.
Expected Output	Two operators along with their permits, installation and accounts should be created.
Actual Result	**Step One: Import NAP data successful**
	Step Two: Password Generation successful.
	Step Three: Update number formats successful
	Step Four: Propose Bulk Accounts to CITL successful.

9. Propose Transfer

Test Case ID	Test Case Description
ITS_TM	Users can internally /externally transfer allowances from their own accounts.
	Internal Transfer of allowances from Allocation Reserve to new OHAs.
	Internal Transfer of allowances due to NAP amendment to existing OHAs.
	Internal/External transfer of allowances on behalf of operators.
Pre-Condition	
Test Script Name	**Propose Transfer -**
Input	Select 'Propose Transfer' from Transaction Management

	menu.
	Select the Legal Entity as appropriate (e.g. Defra)
	Select an account as appropriate (i.e. Party Holding Account)
	Click Proceed
	Click OK
Expected Output	Number of EUAs for transfer to the external Account should be in units.
Actual Result	**Number of EUAs for transfer to the external Account is in units.**

10. Update Account Details

Test Case ID	Test Case Description
ITS_ACC	Registry Administrators should be able to amend account details, installation and contact details.
	Updating of Primary Account Representative & Secondary Account Representative details as well.
Pre-Condition	
Test Script Name	**Update Account Details**
Input	Select 'Update Account Details' from Manage Accounts menu.
	Select the Legal Entity as appropriate (e.g. Operator 1).
	Select an account as appropriate (i.e. Operator Holding Account).
Expected Output	The user should be able to amend account, installation and contact details as appropriate.
	The update of the account details was successful. Your changes should be proposed to the CITL, and the account representatives will receive an email confirmation.
Actual Result	**The user is able to amend the account, installation and contact details.**
	The account update is successful. Your Changes is proposed to the CITL and the account representative receives an email confirmation.

11. Close Account

Test Case ID	Test Case Description
ITS_ACC	RA is able to close an account that has a zero balance.
Pre-Condition	
Test Script Name	**Close Account**
Input	Select 'Close Account' from Manage Accounts menu
	Select the Legal Entity as appropriate (e.g. Operator 1)
	Select an account as appropriate (i.e. Person Holding)
Expected Output	RA able to propose an account closure but despite never having been issued with allowances, the closure was rejected as "7117 – The installation linked to the specific account is not in compliance therefore it is not possible to close the account". I thought this only applied where allowances have been allocated. This needs to be checked again with the commission.
	The account should be closed successfully.
Actual Result	**The account is closed successfully.**

12. Transaction Status

Test Case ID	Test Case Description
ITS_AD	RA is able to update the transaction status.
Pre-Condition	Enter an appropriate Transaction Number
Test Script Name	**Transaction Status**
Input	Select 'Transaction Status' from Admin Functions menu.
Expected Output	The transaction status should be updated.
Actual Result	**The transaction status is updated.**

13. Propose Issuance

Test Case ID	Test Case Description
ITS_IS	The user should be allowed to propose an issuance.
Pre-Condition	Unit type should be requested. For e.g. EU Force Majeure (FM) Enter the Permit for operator 1 and search for the installation. Amount of FM to be issued. Year.
Test Script Name	**Propose Issuance**
Input	Select 'Propose Issuance' from Issuance menu. Select the Legal Entity as appropriate (e.g. Defra) Select an account as appropriate (i.e. Party Holding)
Expected Output	The issuance request should be held on the Registry Administrator's work queue for approval. The issuance request should be approved and the allowances have a status 'Active'.
Actual Result	**The issuance request is requested and approved.**

14. Status of Transactions (Completed / Non-Completed)

Test Case ID	Test Case Description
ITS_B12	Status of transactions needs to be updated until the CITL has acknowledged receipt of the request or response message.
Pre-Condition	Ensure valid format is keyed in.
Test Script Name	**Transaction Status**
Input	Select Admin Menu. Select Transaction Status. Enter the Transaction Number. Input the Transaction Number.
Expected Output	As with all other messages sent to CITL, the GRETA software should continuously try to send this message to CITL until successful. The transaction status should be shown by clicking on the transaction status as Completed/Not Completed as per transaction.
Actual Result	**Status of transaction is not updated until the CITL has acknowledged receipt of the request or response message.**

15. Rollback

Test Case ID	Test Case Description
ITS_B13	Rollback functionality needs to be reviewed for transaction processes like issuance, cancellation, correction to allowances, amend NAP, internal and external transfer, surrender, cancel

	& replace, cancel & retire in order to determine whether any further changes needs to be applied.
ITS_B14	The rollback functionality needs to be reviewed for all account management processes like update account, open account, close account, propose/approve emissions and update emissions.
Pre-Condition	
Test Script Name	**Roll back**
Input	Select Propose issuance, Propose Cancellation, EU Cancel & Replace, EU Cancel & Retire, Surrender Allowances and Correction to Allowances, Amend NAP and Internal & External Transfer. Select Update Account, Open Account, Close Account, Propose/Approve emissions, Update Emissions.
Expected Output	The CITL should reject the transaction. So that rollback of data occurs. Certain scenarios like issuance, cancellation, correction to allowances, amend NAP, internal & external transfer, update account details, open account, close account, propose & approve emissions and update emissions are tested for rollback functionality.
Actual Result	**The CITL rejects the transaction. So that rollback of data occurs. Certain scenarios like issuance, cancellation, correction to allowances, amend NAP, internal & external transfer, update account details, open account, close account, propose & approve emissions and update emissions are tested for rollback functionality.**

16. Installation Transfer

Test Case ID	Test Case Description
ITS_B15 ITS_B16	When the CITL rejects an installation transfer, the system does not rollback. The rollback functionality needs to be reviewed when AAR's are rejected or not recorded on the CITL. While propose installation transfer on entering the acquiring operator id and click on continue an error has occurred performing this process.
Pre-Condition	
Test Script Name	**Installation Transfer** -
Input	Select Accounts menu Select Propose Installation Transfer Select the Legal Entity and the account which corresponds to the Installation to be transferred.
Expected Output	The system should not roll back when the CITL rejects an installation transfer. At the time of proposed installation transfer while entering the acquiring operator id and pressing continue, error message should not pop-up.
Actual Result	**The system does not rollback when CITL rejects an installation transfer. While proposing an installation transfer general error message is not popped up.**

17. Transaction Duplication

Test Case ID	Test Case Description
ITS_B52	When the screen is refreshed by pressing the F5 button or using web browser buttons at the time of surrender allowance duplicate transaction occurs.
Pre-Condition	
Test Script Name	**Transaction Duplication** **-**
Input	Select Compliance Menu Select Surrender Allowances
Expected Output	User should be allowed to enter the surrender button to complete the transaction. Even if the user is tried to press F5 duplicate transaction should not be shown.
Actual Result	**No duplicate transaction is shown at the time pressing F5 button.**

18. Display Balance

Test Case ID	Test Case Description
ITS_B17	When a transaction is rejected by CITL, the Registry would roll-back the derived unit balance running total figure held in the account table i.e. registry subtract the transferred amount from unit balance of the acquiring account and registry add the transferred amount to unit balance of the transferring account.
Pre-Condition	Allowances to be attached to the account.
Test Script Name	**Display Balance Details**
Input	Select Accounts menu Select Display Balance Details Select an account to work
Expected Output	The balance details should be displayed according to the account selected. The balance details should not change from the original because the CITL has rejected the transaction. The message should be displayed as CITL has rejected the transaction.
Actual Result	**The balance details are displayed according to the account selected.**

19. User Management / Account Holder

Test Case ID	Test Case Description
ITS_B21	When an external transfer has been accepted by the acquiring registry, the registry sends an email to notify the account holder of the acquiring account. This has caused a problem as in one instance the account holder user no longer has access to the account. The system should be amended to send an email to notify the PAR & SAR users of the acquiring account instead.
Pre-Condition	
Test Script Name	**User Management / Account Holder**
Input	Select Entity Select Account

Expected Output	If a PAR is being changed or no longer associated with an account, the account holder of that account should no longer receive the notification as PAR is same as account holder of that account.
Actual Result	**PAR is not receiving the notification once he is no longer associated with the account.**

20. View Account Details

Test Case ID	Test Case Description
ITS_B22 ITS_B53	The registry software submits the correct account holder information to the CITL when opening a new account. All account holder details currently held by the CITL must be updated, to show the relevant organization details.
Pre-Condition	Account activity should be associated with current account.
Test Script Name	**View Account**
Test Script Name	
Input	Select Accounts menu Select View Account Details Select Entity
Expected Output	The registry software should submit the correct account holder information to the CITL when opening a new account. Account holders details currently held by the CITL must be updated, to show the relevant organization details. Deleted users details are still shown under View Account Details.
Actual Result	**The deleted user is not shown in the list of users.**

21. Account Blocking

Test Case ID	Test Case Description
ITS_B11	When the block is actually invoked, it does not conform to the registry regulations it should only block transfer of allowances out of the account, NOT appoint verifier, propose/record emissions, surrender, cancel and replace.
Pre-Condition	Ensure proper legal entity is selected.
Test Script Name	**Block Account**
Input	Select Accounts menu Select Block/Unblock Account
Expected Output	Registry Administrator should be able to block and unblock accounts within the registry. The selected account should be displayed stating the current account is not blocked click below to block it. After the account is blocked still the verifier should be able to view the account.
Actual Result	**Registry Administrator is able to block and unblock the accounts.**

22. Appoint Verifier

Test Case ID	Test Case Description
ITS_ACC	Able to appoint a verifier from the approved list. Email sent to

	verifier.
Pre-Condition	Ensure proper legal entity is selected.
Test Script Name	**Appoint Verifier** -
Input	Select Accounts menu Select Appoint Verifier Click search to select legal entity Select Open Account
Expected Output	Operator should be able to appoint a verifier from the authorized verifier list. Email should be sent to Primary Account Representative & Secondary Account Representative.
Actual Result	**Email is sent to primary account representative and secondary account representative.**
	Cases: The account in question is of an incorrect type. You can only appoint a verifier to an operator holding account. An error has occurred performing this process. Please report the error to your country's helpdesk. The account is currently not 'Active' therefore you cannot perform the required action on it. An error has occurred performing this process. Please report the error to your country's helpdesk.

23. Display Balance Details

Test Case ID	Test Case Description
ITS_ACC	This action was also performed when CITL has returned a discrepancy response to our transaction request before the transaction has been completed. The account balance discrepancy display as that reported by UK and Sweden.
Pre-Condition	Please ensure proper allowances are attached to the account.
Test Script Name	**Display Balance Details**
Input	Select Accounts menu Select Display Balance Details Select an account to work
Expected Output	RA should be able to display the account balance details without discrepancy.
Actual Result	**RA is able to display the account balance details without discrepancy.**

24. View Account

Test Case ID	Test Case Description
ITS_ACC	RA to be able to view the account details.
Pre-Condition	Please ensure proper allowances are attached to the account.
Test Script Name	**View Account**
Input	Select Accounts menu Select View Account Select an account to work
Expected Output	RA should be able to view the account details.
Actual Result	**RA is able to view the account details.**

25. Account Reports

Test Case ID	Test Case Description

ITS_ACC	RA to be able to view the account details.
Pre-Condition	Please ensure proper allowances are attached to the account.
Test Script Name	**Account Reports**
Input	Select Accounts menu Select Account Reports Select an account to work
Expected Output	RA should be able to generate and run the following account reports: Account Units, Account Summary, Organization Account Summary, Account Incomplete Transactions, Account Complete Transactions, and Account Transfers. Account Reports should be shown in CSV, PDF and excel format.
Actual Result	**RA is able to generate and run the reports.**

26. Block/Unblock Accounts

Test Case ID	Test Case Description
ITS_ACC	RA to be able to block an account and then re-access the account to un-block it. Relevant emails sent to PAS/SAR and RA.
Pre-Condition	
Test Script Name	**Block Account** **Unblock Account**
Input	Select Accounts menu Select Block/Unblock Account.
Expected Output	RA should be able to block and unblock accounts within the registry. The selected account should be displayed stating the current account is not blocked click below to block it.
Actual Result	**RA is able to block and unblock accounts within the registry.**

27. Flag/Suspected Units

Test Case ID	Test Case Description
ITS_ACC	RA must be able to access function. Able to flag the account, serial numbers and individual transactions. Relevant emails issued to users (change request previously submitted to remove these emails). Able to cancel action. Email issued to users.
Pre-Condition	Account to be blocked for flag suspected action to be taken place.
Test Script Name	**Flag Suspect Units**
Input	Select Accounts menu Select Flag/Suspected Units
Expected Output	RA should be able to flag suspect units. A message will be displayed at the top of the page stating whether the account has been successfully suspended.
Actual Result	**RA is able flag suspect units.**

28. Prevention Inactive Account Closure

Test Case ID	Test Case Description
ITS_ACC	RA must be able to view screen. Unable to test as no accounts were flagged for closure. Need to be inactive for 1 year and have zero allowances.

Pre-Condition	Required Inactive account for prevention of inactive account closure action to take place.
Test Script Name	**Prevention Inactive Account Closure** -
Input	Select Accounts menu
	Select Prevention Inactive Account Closure
Expected Output	RA should be able to prevent an inactive account closure on a PHA.
Actual Result	**RA is able to prevent an inactive account closure on a PHA.**

29. Appoint AAR

Test Case ID	Test Case Description
ITS_ACC	RA must be able to view Internal AAR and External AAR.
Pre-Condition	Select Legal Entity and Account to view an Internal and External AAR.
Test Script Name	**Appoint AAR**
Input	Select Accounts menu
	Select Appoint AAR
Expected Output	RA should be able to view Internal and External AAR. RA should be able to add a new Internal and External AAR successfully.
Actual Result	**RA is able to view Internal & External AAR.**

30. Accept Installation Transfer

Test Case ID	Test Case Description
ITS_ACC	RA must be able to propose and accept an installation transfer. Transaction history availability allowed. Request posted in WQ requiring different RA approval.
Pre-Condition	Select Legal Entity to work with.
	Proposed Installation Transfer should be there.
Test Script Name	**Accept Installation Transfer**
Input	Select Accounts menu
	Select Accept Installation Transfer
Expected Output	RA should be able to accept the proposed transfer on behalf of new operator. The installation transfer will be posted to the RA work queue.
Actual Result	**RA is able to accept the proposed transfer on behalf of new operator.**

31. Assign Account Groups

Test Case ID	Test Case Description
ITS_ACC	RA must be able to assign account groups.
Pre-Condition	Select an Account to work with.
Test Script Name	**Assign Account Groups**
Input	Select Accounts menu
	Select Assign Account Group
Expected Output	RA should be able to assign account groups. RA should select a proper account to assign groups like EA, SEPA, DOENI, DTI and Gibraltar. Check any one of the group and click on Apply. The account should be assigned successfully.
Actual Result	**RA is able to assign account groups.**

32. Propose Emissions

Test Case ID	Test Case Description
ITS_COM	The user must be able to enter the installation ID and click on the 'Get Details' button, operator name, permits number and installation name is displayed. In the emissions details select the appropriate year and enter the number of units, then click validate. Once the details have been validated, the emissions must be submitted or the process cancelled. A success or failure message is then displayed at the top of the page. If the emissions are successfully submitted, the verified emissions process has a status of completed.
Pre-Condition	The user has to appoint a verifier before they can propose verified emissions.
Test Script Name	**Propose Emissions**
Input	Select Compliance Menu Select Propose Emissions Enter Installation ID.
Expected Output	The RA should submit the proposed emissions successfully.
Actual Result	**RA is able to submit emissions successfully.**

33. Approve Emissions

Test Case ID	Test Case Description
ITS_COM	On selecting the pending emission transaction to approve, the installation details and proposed emission record is displayed.
Pre-Condition	Only Verifiers and Registry Administrators have access to this screen.
Test Script Name	**Approve Emissions**
Input	Select Compliance Menu Select Approve Emissions
Expected Output	Click on Approve button a message is displayed regarding the success or failure of the approval action and any remaining transactions for verification should be displayed.
Actual Result	**RA is able to approve emissions.**

34. Update Emissions

Test Case ID	Test Case Description
ITS_COM	Enter the Installation ID and click on Get Details button, the operator name, permit number and installation name is displayed. Select the appropriate year, amend the number and installation name is displayed. Click on Yes a success or failure message is displayed.
Pre-Condition	
Test Script Name	**Update Emissions**
Input	Select Compliance Menu Select Update Emissions
Expected Output	The RA should be able to update previously approved verified emissions for an installation. This is normally done upon receipt of new emissions information.

Actual Result	**RA is able to update previously approved verified emissions for an installation.**

35. Surrender Allowances

Test Case ID	Test Case Description
ITS_COM	Enter the Installation ID and select the year then click the Get Details button. The operator details, surrendered units and verified emissions details are displayed.
Pre-Condition	For an installation to be in compliance an equal number of units (or more) must be surrendered in comparison to the total verified emissions for the period.
Test Script Name	**Surrender Allowance**
Input	Select Compliance Menu Select Surrender Allowances
Expected Output	User should be allowed to enter the surrender button to complete the transaction.
Actual Result	**User is allowed to enter the surrender button to complete the transaction.**

36. CER & ERU Surrender Limit

Test Case ID	Test Case Description
ITS_COM	The Default view, allows the user to work with all installations. The search view allows the user to work with specific installation to set percentage limit.
Pre-Condition	The EU Registries Regulation states that from 1st Jan'08 CER's and ERUs can only be used up to a percentage limit of the allocation made to each installation.
Test Script Name	**CER ERU Surrender Limit**
Input	Select Compliance Menu Select CER & ERU Surrender Limit
Expected Output	The RA should be able to perform Update All Performances, Clear All CER Percentages, Clear All ERU Percentages & Add Missing Installations.
Actual Result	**RA is able to perform update all performances, clear all CER percentages, clear all ERU percentages and add missing installations.**

37. View Verifier Appointments

Test Case ID	Test Case Description
ITS_COM	Enter the Verifier organization Name, Verifier Last Name and Verifier First Name then click on Search button. The user must be able to select verifier from the search facility.
Pre-Condition	
Test Script Name	**View Verifier Appointments**
Input	Select Compliance Menu Select View Verifier Appointments
Expected Output	The user should be able to view verifier appointments details.
Actual Result	**User is able to view verifier appointments details.**

38. View Emissions History

Test Case ID	Test Case Description
ITS_COM	On entering the installation id, the emissions history for that installation will be displayed.
Pre-Condition	
Test Script Name	View Emissions History
Input	Select Compliance Menu Select View Emissions History
Expected Output	The user should be able to view the emission history details.
Actual Result	**User is able to view the emission history details.**

39. Create New User

Test Case ID	Test Case Description
ITS_URS	RA must be able to create a new admin user. RA must be able to promote/demote user to control their access.
Pre-Condition	
Test Script Name	**Create New User** -
Input	Select Users Menu Select Manage Admin Users Select Create New Users Select Organization
Expected Output	RA should be able to create a new admin user. The RA should be able to promote/demote user to control their access. Once the user is created password should be sent to the user to the email specified at the time of creating a new user.
Actual Result	**RA must be able to create a new admin user.** **RA must be able to promote/demote user to control their access.**

40. Delete User

Test Case ID	Test Case Description
ITS_URS	RA must be able to delete an admin user.
Pre-Condition	
Test Script Name	**Delete User** -
Input	Select Users Menu Select Manage Admin Users Select Delete Users Select Organization
Expected Output	RA should be able to delete a user (admin or other)
Actual Result	**RA is able to delete a user.**

41. Suspend Admin User

Test Case ID	Test Case Description
ITS_URS	RA must be able to suspend an admin user.
Pre-Condition	
Test Script Name	**Suspend Admin User** -
Input	Select Users Menu Select Manage Admin Users Select Suspend Users

	Select Organization
Expected Output	In user details click on suspend user. RA should be able to suspend a user. On clicking on suspend the full user details are displayed and the action should be confirmed or cancelled.
Actual Result	**RA is able to suspend a user.**

42. Unsuspend Admin User

Test Case ID	Test Case Description
ITS_URS	RA must be able to Unsuspend an admin user.
Pre-Condition	
Test Script Name	**Unsuspend Admin User -**
Input	Select Users Menu Select Manage Admin Users Select Unsuspend Users Select Organization
Expected Output	In user details click on Unsuspend user. RA should be able to unsuspend a user. On clicking on suspend the full user details are displayed and the action should be confirmed or cancelled.
Actual Result	**RA is able to unsuspend a user.**

43. Promote Admin User

Test Case ID	Test Case Description
ITS_URS	RA must be able to Promote an admin user.
Pre-Condition	
Test Script Name	**Promote Admin User -**
Input	Select Users Menu Select Manage Admin Users Select Unsuspend Users Select Organization
Expected Output	RA should be able to promote a user. On clicking on promote the full user details are displayed and the action should be confirmed or cancelled.
Actual Result	**RA is able to promote the full user details.**

44. Demote Admin User

Test Case ID	Test Case Description
ITS_URS	RA must be able to Demote an admin user.
Pre-Condition	
Test Script Name	**Demote Admin User -**
Input	Select Users Menu Select Manage Admin Users Select Unsuspend Users Select Organization
Expected Output	RA should be able to Demote a user. On clicking on demote the full user details are displayed and the action should be confirmed or cancelled.
Actual Result	**RA is able to demote the full user details.**

45. Assign User to Account Groups

Test Case ID	Test Case Description
ITS_URS	On clicking the 'All account Groups' button will give the user access to all current account groups and any future account groups that may be created. This is different from checking all the boxes for the listed account groups which are not automatically give the user access to future account groups.
Pre-Condition	
Test Script Name	**Assign Account Groups**
Input	Select Users Menu Select Manage Admin Users Select Assign User to Account Group Select Legal Entity
Expected Output	RA should be able to assign user to account groups.
Actual Result	**RA is able to assign user to account groups.**

46. Reset User Password

Test Case ID	Test Case Description
ITS_URS	In order to reset an administrator user's password, the 'Reset User Password' menu option from the 'Manage Admin Users' submenu should be used.
Pre-Condition	The users for default Legal Entity should be displayed.
Test Script Name	**Reset User Password -**
Input	Select Users Menu Select Manage Admin Users Select Reset User Password Select Legal Entity Select Account ID
Expected Output	The RA should be able to reset the administrator password.
Actual Result	**RA is able to reset the administrator password.**

47. Request New User

Test Case ID	Test Case Description
ITS_URS	User must be able to request for a new user.
Pre-Condition	New User requests would require approval by the Registry Administrator. If the user is set an AAR they can never be selected as a PAR or SAR for an account. If they are not an AAR, they can never be selected as an AAR for an account.
Test Script Name	**Request New User -**
Input	Select Users Menu Select Manage Users Select Request New User Select Legal Entity
Expected Output	User should be able to request a new user.
Actual Result	**User is able to request a new user.**

48. Delete User

Test Case ID	Test Case Description
ITS_URS	The RA must be able to delete the user. The user is not allowed to delete them.
Pre-Condition	If the user is primary, secondary or additional authorized

	representative for an account, please appoint a new primary or secondary authorized representative for that account before deleting the user. This can be done through the update relationships option of the edit account details section of the update account details or appoint AAR page.
Test Script Name	**Delete User** -
Input	Select Users Menu Select Manage Users Select Delete User Select Legal Entity
Expected Output	RA should be allowed to delete the user.
Actual Result	**RA is able to delete the user.**

49. Suspend User

Test Case ID	Test Case Description
ITS_URS	The RA must be able to suspend the user.
Pre-Condition	The user cannot suspend themselves
Test Script Name	**Suspend User** -
Input	Select Users Menu Select Manage Users Select Suspend User Select Legal Entity
Expected Output	The RA should be allowed to suspend the user. On clicking the Suspend button the full details of the user are displayed and the user can confirm or cancel the action.
Actual Result	**RA is able to suspend the user.**

50. Unsuspended User

Test Case ID	Test Case Description
ITS_URS	The RA must be able to Unsuspend the user.
Pre-Condition	The user cannot suspend them.
Test Script Name	**Unsuspended User** -
Input	Select Users Menu Select Manage Users Select Unsuspend User Select Legal Entity
Expected Output	The RA should be allowed to Unsuspend the user. On clicking the Unsuspend button the full details of the user are displayed and the user can confirm or cancel the action.
Actual Result	**RA is able to unsuspend the user.**

51. Promote User

Test Case ID	Test Case Description
ITS_URS	The RA must be able to Promote a user.
Pre-Condition	
Test Script Name	**Promote User** -
Input	Select Users Menu Select Manage Users Select Promote User Select Legal Entity
Expected Output	The RA should be allowed to promote a user.

Actual Result	RA is able to promote the user.

52. Demote User

Test Case ID	Test Case Description
ITS_URS	The RA must be able to Demote a user.
Pre-Condition	
Test Script Name	Demote User -
Input	Select Users Menu Select Manage Users Select Demote User Select Legal Entity
Expected Output	The RA should be allowed to promote a user.
Actual Result	**The RA must be able to Demote a user.**

53. Reset User Password

Test Case ID	Test Case Description
ITS_URS	RA must be able to reset the user password.
Pre-Condition	
Test Script Name	Reset User Password -
Input	Select Users Menu Select Manage Users Select Reset User Password Select Legal Entity Select Address Select Country of Registry
Expected Output	The RA should be able to reset the password.
Actual Result	**RA is able to reset the full user details.**

54. Propose Issuance

Test Case ID	Test Case Description
ITS_ISS	Select Unit Type, enter number of units, select commitment period, select country of origin and enter details supporting this application. Click Submit Request. Issuance Request added to work queue.
Pre-Condition	All the accounts for the selected entity will be displayed, but the user must select one of the Party Holding Accounts for issuance. The Unit Type must be in line with the commitment period.
Test Script Name	Propose Issuance
Input	Select Issuance Menu Select Propose Issuance Select Legal Entity Select Account to work with Click Search Click Work Queue to approve issuance request
Expected Output	Issuance should be added to the work queue.
Actual Result	**Issuance is added to the work queue.**

55. National Allocation

Test Case ID	Test Case Description
ITS_ISS	Select Year and click on assign now button the national allocation plan units and assigns the units to all the relevant accounts.
Pre-Condition	National Allocation Plan must be uploaded into the system before this functionality can be used. This function may be performed multiple times to allocate allowances to those installations that have previously failed to be allocated to. Account should be Party Holding Account.
Test Script Name	**National Allocation**
Input	Select Issuance Menu Select National Allocation Select Legal Entity Select Year from drop down list
Expected Output	National allocation plan units should be assigned after clicking on assign button.
Actual Result	**National Allocation Plan units are able to assign after clicking on assign button.**

56. National Allocation Details

Test Case ID	Test Case Description
ITS_ISS	Once the National Allowance has been run, the user can see whether the allocation has been successful and how much has been allocated to each organization /permit / installation for a particular year.
Pre-Condition	
Test Script Name	**National Allocation Details -**
Input	Select Issuance Menu Select National Allocation Details Select Allocation Year
Expected Output	The user should be able to see whether the allocation has been successful and how much has been allocated to each organization / permit / installation for a particular year.
Actual Result	**User is able to see whether the allocation has been successful and hoe much has been allocated to each organization / permit / installation for a particular year.**

57. Propose Manual Allocation

Test Case ID	Test Case Description
ITS_ISS	When there is an increase in allocation for an existing installation,
Pre-Condition	Allocating to new entrants should be performed by internal transfer.
Test Script Name	**Propose Manual Allocation -**
Input	Select Issuance Menu Select Propose Manual Allocation Select Legal Entity Select Account to work with Enter Installation ID
Expected Output	Manual Allocation should be performed when there is an increase in allocation for an existing installation.
Actual Result	**Manual Allocation is performed when there is an**

	increase in allocation for an existing installation.

58. Amend National Allocation

Test Case ID	Test Case Description
ITS_ISS	This screen queries the NAP table the user must enter appropriate data into the search criteria to bring back the relevant record that the user wishes to amend.
Pre-Condition	
Test Script Name	**Amend National Allocation**
Input	Select Issuance Menu Select Amend National Allocation Select Commitment Period Select Activity Type Enter Organization Name Enter Permit ID Enter Installation Name Enter Installation ID Select Allocation Prevented Click Search
Expected Output	The user should enter appropriate data into the search criteria to bring back the relevant record that the user wishes to amend.
Actual Result	**User is able to enter appropriate data into the search criteria to bring back the relevant record that the user wishes to amend.**

59. Prevent Allocation

Test Case ID	Test Case Description
ITS_ISS	This page allows the RA to block the installation of allowances to the specified installation during the National Allocation process. If the RA wants to prevent the allocation of allowances to a particular year, they can tick the check box. This can also be unticked to allow the allocation. If the allocation was prevented during the process, it will need to be run again so that the installation receives its allowances.
Pre-Condition	This is privilege permission and should only be performed by the Registry Administrator.
Test Script Name	**Prevent Allocation**
Input	Select Issuance Menu Select Prevent Allocation Select Commitment Period Select Activity Type Enter Organization Name Enter Permit ID Enter Installation Name Enter Installation ID Select Allocation Prevented Click Search
Expected Output	The RA should be able to prevent the allocation of allowances for a particular year.
Actual Result	**RA is able to prevent the allocation of allowances for a particular year.**

60. Record Assigned Amount

Test Case ID	Test Case Description
ITS_ISS	The RA can record the assigned amount, for a specific commitment period. The assigned amount determines the maximum number of AAU's that a party may issue for the specified commitment period and must be recorded before performing AAU issuance.
Pre-Condition	
Test Script Name	**Record Assigned Amount**
Input	Select Issuance Menu Select Record Assigned Amount Input Pre Kyoto Period Input First Commitment Period Input Second Commitment Period Input Third Commitment Period Input Fourth Commitment Period Input Fifth Commitment Period
Expected Output	The RA should be able to record assigned amount for a particular commitment period.
Actual Result	**RA is able to record assigned amount for a particular commitment period.**

61. RMU Issuance Parameters

Test Case ID	Test Case Description
ITS_ISS	The RA can specify the issuance limit and frequency for the different LULUCF activity categories for removal units (RMU). The information is required for the issuance of RMU units, which is not due until commitment period 1.
Pre-Condition	
Test Script Name	**RMU Issuance Parameters**
Input	Select Issuance Menu Select RMU Issuance Parameters Select Kyoto Commitment Period from drop down Specify Issuance Limit Select Category 1: Afforestation & Reforestation from drop down. Select Category 2: Deforestation from drop down Select Category 3: Forest Management from drop down Select Category 4: Cropland Management from drop down Select Category 5: Grazing Land Management from drop down. Select Category 6: Revegetation from drop down. Click Save
Expected Output	The RA should be able to specify the issuance limit and frequency for the different activity categories for removal units.
Actual Result	**RA is able to specify the issuance limit and frequency for the different activity categories for removal units.**

62. Propose Transfer (Internal)

Test Case ID	Test Case Description

Test Case ID	Test Case Description
ITS_TMT	The RA must check whether transfer occurs between accounts within a registry.
Pre-Condition	Incase of internal transfer, the existence of the account id is checked by clicking the Get Account Details button. If any transaction is successfully validated by the registry, a transaction summary is displayed and the transaction is sent to the external log.
Test Script Name	**Propose Internal Transfer**
Input	Select Transaction Management Select propose Transfer Enter Transferor Details Enter Acquirer Details Enter General Details Click Submit
Expected Output	On clicking submit button the registry checks that sufficient units are available in the transferring account.
Actual Result	**On clicking submit button the registry checks that sufficient units is available in the transferring account.**

63. Propose Transfer (External)

Test Case ID	Test Case Description
ITS_TMT	The RA must check whether transfer occurs between accounts in different registries.
Pre-Condition	Incase of external transfer, the transaction log sends the proposal to the acquiring registry for validation.
Test Script Name	**Propose External Transfer**
Input	Select Transaction Management Select propose Transfer Enter Transferor Details Enter Acquirer Details Enter General Details Click Submit
Expected Output	On clicking submit button the registry checks that sufficient units are available in the transferring account.
Actual Result	**On clicking submit button the registry checks that sufficient units is available in the transferring account.**

64. Propose Cancellation

Test Case ID	Test Case Description
ITS_TMT	Once the units are cancelled, they cannot be transferred out of the account or used for compliance purposes. In the Pre-Kyoto period any units for cancellation will be transferred to the voluntary cancellation account for that period.
Pre-Condition	
Test Script Name	**Propose Cancellation**
Input	Select Transaction Management Select Propose Cancellation Enter Transferor Details Enter Acquirer Details Enter General Details Click Submit
Expected Output	On clicking submit button the registry checks that sufficient

	units are available in the transferring account. If transactions are successfully validated by the registry, a transaction summary is displayed and the transaction is sent to the transaction log.
Actual Result	**On clicking submit button the registry checks that sufficient units is available in the transferring account. Transactions are successfully validated by the registry, transaction summaries are displayed and the transaction is sent to the transaction log.**

65. EU Cancel & Replace

Test Case ID	Test Case Description
ITS_TMT	The RA must be able to cancel all EU Allowances from every holding account for the selected period. These are then replaced by the same number of EU allowances which have been converted from AAUs in the Party Holding Account for the next period.
Pre-Condition	If the exception is when the process is run in period 1, all EU Allowances from period 0 are cancelled and are replaced by a number of period 1 allowances equivalent to the number of cancelled allowances multiplied by the replacement percentage.
Test Script Name	**Cancel & Replace**
Input	Select Transaction Management Select EU Cancel & Retire Select Party Holding Account from drop down Select Commitment Period from drop down Input Replacement Percentage Click Validate Cancel and Replace
Expected Output	On clicking the confirm button should cancel all EU allowances from every holding account for the selected period.
Actual Result	**On clicking the confirm button cancels all EU allowances from every holding account for the selected period.**

66. EU Cancel & Retire

Test Case ID	Test Case Description
ITS_TMT	The user must perform the EU cancellation and retirement process, which is part of EU compliance process. The number of units for retirement must be equal the number of units surrendered for that period.
Pre-Condition	This is a privileged function and should be performed only by the Registry Administrators.
Test Script Name	**Cancel & Retire**
Input	Open an New Account from Accounts Menu Upload Nap Data from Admin Menu Propose Issuance from Issuance Menu Select Year for National Allocation from drop down Select Legal Entity Select Account Input General Details Click Proceed

Expected Output	On clicking proceed button the transaction should be initiated successfully. After the transaction is validated by the registry, a transaction summary is displayed and the transaction is sent to the transaction log.
Actual Result	**On clicking proceed button the transaction is initiated successfully. After the transaction is validated by the registry, transaction summaries are displayed and the transaction is sent to the transaction log.**

67. Kyoto Retirement

Test Case ID	Test Case Description
ITS_TMT	The retirement has been initiated from a party holding account; the system also informs the administrator of the number of outstanding Kyoto units to be retired and suggests the required units to retire, in order to be in compliance.
Pre-Condition	This is a privileged function and should be performed only by the Registry Administrators.
Test Script Name	**Kyoto Retirement**
Input	Open an New Account from Accounts Menu Upload Nap Data from Admin Menu Propose Issuance from Issuance Menu Select Year for National Allocation from drop down Select Legal Entity Select Account Select Commitment period from drop down Input General Details Click Proceed
Expected Output	On clicking proceed button the transaction should be initiated successfully. After the transaction is validated by the registry, a transaction summary is displayed and the transaction is sent to the transaction log.
Actual Result	**On clicking proceed button the transaction is initiated successfully. After the transaction is validated by the registry, transaction summaries are displayed and the transaction is sent to the transaction log.**

68. Propose Carry-Over

Test Case ID	Test Case Description
ITS_TMT	The retirement has been initiated from a party holding account; the system also informs the administrator of the number of outstanding Kyoto units to be retired and suggests the required units to retire, in order to be in compliance.
Pre-Condition	This is a privileged function and should be performed only by the Registry Administrators.
Test Script Name	**Propose Carryover**
Input	Open an New Account from Accounts Menu Upload Nap Data from Admin Menu Propose Issuance from Issuance Menu Select Year for National Allocation from drop down Select Legal Entity Select Account Click Carryover period 0 to period 1 Click Proceed
Expected Output	On clicking proceed button the transaction should be initiated

successfully. After the transaction is validated by the registry, a transaction summary is displayed and the transaction is sent to the transaction log.

Actual Result	**On clicking proceed button the transaction is initiated successfully. After the transaction is validated by the registry, transaction summaries are displayed and the transaction is sent to the transaction log.**

69. Propose Conversion

Test Case ID	Test Case Description
ITS_TMT	The RA must perform the Kyoto conversion process to create Emission Reduction Units for eligible JI projects.
Pre-Condition	This is a privileged function and should be performed only by the Registry Administrators.
Test Script Name	**Propose Conversion**
Input	Open an New Account from Accounts Menu Upload Nap Data from Admin Menu Propose Issuance from Issuance Menu Select Year for National Allocation from drop down Select Legal Entity Select Account Click Carryover period 0 to period 1 Click Details to acquire account id Enter conversion details View units available for conversion Click Proceed
Expected Output	On clicking proceed button the transaction should be initiated successfully. After the transaction is validated by the registry, a transaction summary is displayed and the transaction is sent to the transaction log.
Actual Result	**On clicking proceed button the transaction is initiated successfully. After the transaction is validated by the registry, transaction summaries are displayed and the transaction is sent to the transaction log.**

Create New User

70. Upload NAP Data

Test Case ID	Test Case Description
ITS_ADM	Import the spreadsheet data
Pre-Condition	Spreadsheet of Installations, accounts, users and NAP allocations for the years within a particular period is created and approved.
Test Script Name	**Upload NAP Data**
Input	Select Admin Menu Click on upload NAP Data
Expected Output	Upload Data screen will be displayed from there user will be able to Import Spreadsheet Data, 'Generate' Password Generation, Update the Number Formats & Propose Bulk Accounts to CITL.
Actual Result	**NAP Data is uploaded into the system.**

71. Add To NAP

Test Case ID	Test Case Description
ITS_ADM	Select Admin Menu, click 'Add To NAP' Insertion of Installation ID is required or it can be viewed by clicking on 'Get Details'
Pre-Condition	NAP Table has already created & agreed amendments with commission exists.
Test Script Name	**Add To NAP**
Input	Select Admin Menu Click on upload NAP Data Insert Installation ID & enter
Expected Output	Installation Details should be shown with Permit ID, Organization Name, Installation Name, Account ID, and Account Name.
Actual Result	**Installation details is shown with Permit ID, Organization Name, Installation Name, Account ID, and Account Name.**

72. Installation ID

Test Case ID	Test Case Description
ITS_ADM	To allocate Yearly allocation in NAP Table - Select Admin Menu, click 'Add To NAP' Insertion of Installation ID is required or it can be viewed by clicking on 'Get Details' or insert Installation ID.
Pre-Condition	NAP Table has already created & agreed amendments with commission exists.
Test Script Name	**Installation ID**
Input	Select Admin Menu Click on upload NAP Data Insert Installation ID & enter Insert allocation amount Click Add
Expected Output	The allocation amount for each year should be included in NAP table.
Actual Result	**The allocation amount for each year is included in NAP table.**

73. Allocation Confirmation

Test Case ID	Test Case Description
ITS_ADM	Confirmation of allocation to Party Holding Account - Select Admin Menu, click 'Add To NAP' Insertion of Installation ID is required or it can be viewed by clicking on 'Get Details' or insert Installation ID, enter amount and 'Add'
Pre-Condition	NAP Table has already created & agreed amendments with commission exists.
Test Script Name	**Allocation Confirmation -**
Input	Select Admin Menu Click on upload NAP Data Insert Installation ID & enter Insert allocation amount Click Add Select Party Holding Account Click on 'Confirm'

Expected Output	System should give successful Msg. – The additions to NAP have been added to the Registry Administrators work queue.
Actual Result	**Success message is displayed that the additions to NAP have been added to the RA's work queue.**

74. Security Matrix

Test Case ID	Test Case Description
ITS_ADM	Certain groups have access to certain screens & functionality & are controlled by this matrix. This screen can be viewed to see View Groups.
Pre-Condition	Group data should be in Master Table
Test Script Name	**Security Matrix Groups**
Input	Select Admin Menu Click on Security Matrix Click on View Groups
Expected Output	The enlisted Groups should be viewed to user screen after screen depends on number of Groups.
Actual Result	**The enlisted groups are viewed to user screen after screen depends on number of groups.**

75. Edit Security Matrix

Test Case ID	Test Case Description
ITS_ADM	Certain groups have access to certain screens & functionality & are controlled by this matrix. The Roll & access are editable.
Pre-Condition	Group data should be in Master Table
Test Script Name	**Edit Security Matrix -**
Input	Select Admin Menu Click on Security Matrix Click on View Groups Click on Record
Expected Output	The record for certain activity should open where user can edit the access right of particular group.
Actual Result	**The code for certain activity opens for user to edit the activity code for particular functionality.**

76. View Permission

Test Case ID	Test Case Description
ITS_ADM	For every activity contains Permission Code & user need to see 'View Permission' though this.
Pre-Condition	Permission Code data should be in Master Table
Test Script Name	**View Permission -**
Input	Select Admin Menu Click on Security Matrix Click on View Permissions
Expected Output	The codes of all the functionalities should be shown to user.
Actual Result	**The codes of all the functionalities are shown to the user.**

77. Edit Activity Code

Test Case ID	Test Case Description

Test Case ID	Test Case Description
ITS_ADM	All the functionalities have code & these are editable.
Pre-Condition	Permission Code should be in Master Table
Test Script Name	**Edit Activity Code** -
Input	Select Admin Menu Click on Security Matrix Click on View Permission Click on Record
Expected Output	The code for certain activity should open where user can edit the activity code for particular functionality.
Actual Result	**The code for certain activity opens for user to edit the activity code for particular functionality.**

78. Delete Activity

Test Case ID	Test Case Description
ITS_ADM	Any activity can be removed from the admin group using this function.
Pre-Condition	Data should be in the Master Table
Test Script Name	**Delete Activity** -
Input	Select Admin Menu Click on Security Matrix Click on View Groups Click on Record Click on X cross mark
Expected Output	The selected group or activity should be deleted.
Actual Result	**The selected group or activity is deleted.**

79. Data Insertion

Test Case ID	Test Case Description
ITS_ADM	Certain groups & Permission code can be generated newly by using Syntax & Matrix screen.
Pre-Condition	Data should be in the Master Table
Test Script Name	**Data Insertion**
Input	Select Admin Menu Click on Security Matrix Click on View Groups Click on asterisk icon
Expected Output	System will make available a blank box to user to insert value and after clicking on tick mark the value will be saved.
Actual Result	

80. Manage Work Queue

Test Case ID	Test Case Description
ITS_ADM	User can change the priority of the pending work
Pre-Condition	Data should be in Work Queue
Test Script Name	**Manage Work Queue**
Input	Select Admin Menu Click on Manage Work Queue Change in Priority Tab
Expected Output	User should be able to change the priority of Activity.
Actual Result	**User is able to change the priority of activity.**

81. Status Change

Test Case ID	Test Case Description
ITS_ADM	User can change the status of the pending work
Pre-Condition	Data should be in Work Queue
Test Script Name	**Status Change**
Input	Select Admin Menu Click on Manage Work Queue Change in status Tab
Expected Output	User should be able to change the status of Activity.
Actual Result	**User is able to change the status of activity.**

82. Approve Request

Test Case ID	Test Case Description
ITS_ADM	A Registry Administrator can approve a transaction on behalf of an Additional Authorized Representative (AAR).
Pre-Condition	Queue items are in database.
Test Script Name	**Approve Request**
Input	Select Admin Menu Click on AAR Queue Enter User Name, Family Name, First Name Click on Search Click on 'Approve Request'
Expected Output	User should be able to Approve the Request.
Actual Result	**User is able to approve the request.**

83. Approve Transaction

Test Case ID	Test Case Description
ITS_ADM	A Registry Administrator can approve a transaction on behalf of an Additional Authorized Representative (AAR).
Pre-Condition	Queue items are in database.
Test Script Name	**Approve Transaction**
Input	Select Admin Menu Click on AAR Queue Enter User Name, Family Name, First Name Click on Search Click on 'Approve Request'
Expected Output	User should be able to Approve the Request.
Actual Result	**User is able to approve the request.**

84. Transaction Rejection

Test Case ID	Test Case Description
ITS_ADM	A Registry Administrator can reject a transaction on behalf of an Additional Authorized Representative (AAR).
Pre-Condition	Queue items are in database.
Test Script Name	**Transaction Rejection -**
Input	Select Admin Menu Click on AAR Queue Enter User Name, Family Name, First Name Click on Search

	Click on 'Reject Request'
Expected Output	User should be able to Reject the Request.
Actual Result	**User is able to reject the request.**

85. Reject AAR Acceptance

Test Case ID	Test Case Description
ITS_ADM	A Registry Administrator can cancel a transaction on behalf of an Additional Authorized Representative (AAR).
Pre-Condition	Queue items are in database.
Test Script Name	**Reject AAR Acceptance -**
Input	Select Admin Menu Click on AAR Queue Enter User Name, Family Name, First Name Click on Search Click on 'Reject Request'
Expected Output	User should be able to cancel the Request.
Actual Result	**User is able to cancel the request.**

86. Approve AAR Acceptance

Test Script Name	Approve AAR Acceptance -
ITS_ADM	The AAR Acceptance queue is available to the Registry Administrator who can accept the appointment of an AAR to an account on behalf of the AAR.
Pre-Condition	AAR Acceptance Queue is available to the Registry
Test Script Name	**Approve AAR Acceptance**
Input	Select Admin Menu Click on AAR Acceptance Queue Enter User Name, Family Name, First Name Click on Search Click on 'Approve Request'
Expected Output	User should be able to cancel the Request.
Actual Result	**User is able to cancel the request.**

87. AAR Acceptance Queue

Test Case ID	Test Case Description
ITS_ADM	The AAR Acceptance queue is available to the Registry Administrator who can accept the appointment of an AAR to an account on behalf of the AAR & can approve it.
Pre-Condition	AAR Acceptance Queue is available to the Registry
Test Script Name	**AAR Acceptance Queue**
Input	Select Admin Menu Click on AAR Acceptance Queue Enter User Name, Family Name, First Name Click on Search Click on 'Approve Request'
Expected Output	The details of the item needing approval are displayed here and User should be able to Approve the Request.
Actual Result	**User is able to approve the request.**

88. AAR Reject

Test Case ID	Test Case Description
ITS_ADM	The AAR Acceptance queue is available to the Registry Administrator who can accept the appointment of an AAR to an account on behalf of the AAR and can reject request.
Pre-Condition	AAR Acceptance Queue is available to the Registry
Test Script Name	**AAR Reject**
Input	Select Admin Menu Click on AAR Acceptance Queue Enter User Name, Family Name, First Name Click on Search Click on 'Reject Request'
Expected Output	The details of the item needing approval are displayed here and User should be able to Reject the Request.
Actual Result	**User is able to reject the request.**

89. AAR Cancel

Test Case ID	Test Case Description
ITS_ADM	The AAR Acceptance queue is available to the Registry Administrator who can accept the appointment of an AAR to an account on behalf of the AAR and can cancel request.
Pre-Condition	AAR Acceptance Queue is available to the Registry
Test Script Name	**AAR Cancel**
Input	Select Admin Menu Click on AAR Acceptance Queue Enter User Name, Family Name, First Name Click on Search Click on 'Cancel'
Expected Output	The details of the item needing approval are displayed here and User should be able to Cancel the Request.
Actual Result	**User is able to cancel the request.**

90. Manage Custom Schemas

Test Case ID	Test Case Description
ITS_ADM	Each Registry's database can be customized for each Party's needs.
Pre-Condition	Registry Data should exist.
Test Script Name	**Manage Custom Schema**
Input	Select Admin Menu Click on Manage Custom Schemas Select User from Select Schema Click on the pencil icon Insert value in required boxes i.e. Name, Type, Mandatory, Auditable, Length. Click on 'tick icon'
Expected Output	The value of schema should be saved.
Actual Result	**The value of schema is saved.**

91. Delete Custom Schemas

Test Case ID	Test Case Description
ITS_ADM	Each Registry's database can be customized for each Party's needs & old values can be deleted also.
Pre-Condition	Registry Data should exist.
Test Script Name	**Delete Custom Schemas** -
Input	Select Admin Menu Click on Manage Custom Schemas Select User from Select Schema Select 'dustbin icon'
Expected Output	The record should be deleted.
Actual Result	The custom schemas record is deleted.

92. Group Matrix

Test Case ID	Test Case Description
ITS_ADM	User can change the permissions given to a group of users.
Pre-Condition	Group data should be existed in database.
Test Script Name	**Group Matrix**
Input	Select Admin Menu Click on Group Matrix Click on the record 'pencil icon' Check functionality Click on 'tick icon' to save
Expected Output	The modified record should be saved.
Actual Result	**The modified record is saved.**

93. Time Management

Test Case ID	Test Case Description
ITS_ADM	Time Management allows user to remove any messages which are older than a specified number of days.
Pre-Condition	Record should be in Database under ITL
Test Script Name	**Time Management**
Input	Select Admin Menu Select Time Management Insert value to delete the record (as user wants) Click on 'Remove' button
Expected Output	System should remove data as per value inserted by user.
Actual Result	**System removes data as per value inserted by user.**

94. Admin Messages

Test Case ID	Test Case Description
ITS_ADM	User is able to send Transaction Log
Pre-Condition	
Test Script Name	**Admin Messages**
Input	Select Admin Menu Select Admin Messages Insert Messages in Msg. Box Click on Send New Message
Expected Output	Transaction Log should be accepted by system.
Actual Result	**Transaction log is accepted by system.**

95. Transaction Status

Test Case ID	Test Case Description
ITS_ADM	On entering transaction number the user can find out the status of that transaction as recorded by CITL.
Pre-Condition	Transaction process has been successfully executed.
Test Script Name	**Transaction Status**
Input	Select Admin Menu Select Transaction Status Insert Transaction Number Click on 'Search' button Click on 'Select' [Transaction Log Status]
Expected Output	User should be able to see whether the transaction is pending, checked, completed or terminated.
Actual Result	**User is able to see whether the pending, checked, completed or terminated transactions.**

96. Operators Users

Test Case ID	Test Case Description
ITS_ADM	User is able to see list of operators
Pre-Condition	Operators data is in database
Test Script Name	**Operators Users**
Input	Select Admin Menu Select Operator Users
Expected Output	The user should be able to see all operator users, user names within the Registry.
Actual Result	**The user is able to see all operator users, user names within the registry.**

97. Reports

Test Case ID	Test Case Description
ITS_ADM	The reports are generated on a weekly basis, starting in the week after the account has been created in the registry.
Pre-Condition	Required Transactions are executed to view the report.
Test Script Name	**Reports**
Input	Select Admin Menu Select Reports Select Report Type Click on 'Select' Tick on Public Availability box Click on 'Save Public Availability'
Expected Output	User should be able to view reports as well as saved for Public Home Page.
Actual Result	**User is able to view reports as well as saved for public home page.**

98. Generate Reports

Test Case ID	Test Case Description

ITS_ADM	Generation of Reports for various Report Types.
Pre-Condition	Required Transactions are executed to generate the report.
Test Script Name	**Generate Reports**
Input	Select Admin Menu Select Reports Select 'Generate Reports'
Expected Output	Registry Administrator should be able to use this functionality to generate these reports on an ad-hoc basis, although user will be warned by system that this process consumes valuable database resources.
Actual Result	**RA uses this functionality to generate these reports on an adhoc basis although this process consumes valuable database resources.**

99. Adhoc Reports

Test Case ID	Test Case Description
ITS_ADM	User will be produce reports as & when they are required.
Pre-Condition	Required Transactions are executed to generate the report.
Test Script Name	**Adhoc Reports**
Input	Select Admin Menu Select Reports Select 'Ad Hoc Reports' Insert date in 'Date Format' Click on 'Generate'
Expected Output	Registry Administrator can use this functionality to generate these reports on an ad-hoc basis although this process consumes valuable database resources.
Actual Result	**RA uses this functionality to generate these reports on an adhoc basis although this process consumes valuable database resources.**

100. Reconciliation Log

Test Case ID	Test Case Description
ITS_ADM	In this process CITL & Registry ensure that the data is same. There will reconciliation number for a particular reconciliation run.
Pre-Condition	Transactions should have been executed & required data should exist for matching between CITL & Registry.
Test Script Name	**Reconciliation Log** -
Input	Select Admin Menu Select Reconciliation Log Click on icon
Expected Output	Reconciliation request section should display a list of communication between the CITL & the Registry where the communications between them are the CITL's request for various information & the Registry's responses. Status column will have 1 or 0 to identify valid or invalid identity.
Actual Result	**Reconciliation request section displays a list of communication between the CITL and the registry where the communications between the CITL's request for various information of the registry responses.**

101. Rejected Project ID's

Test Case ID	Test Case Description
ITS_ADM	Registry may like to exclude units from projects being surrendered or retired.
Pre-Condition	Any valid amount of units is occupied by a project.
Test Script Name	**Rejected Project ID**
Input	Select Admin Menu Select Reject Project ID's Select Pencil Icon against Project Code Insert Project ID & Reason Click on tick icon to save.
Expected Output	The Registry should be able to exclude unit from projects.
Actual Result	**The registry is able to exclude unit from projects.**

102. Terms & Conditions

Test Case ID	Test Case Description
ITS_ADM	New Terms and Conditions can be created for Website (for view)
Pre-Condition	
Test Script Name	**Terms & Conditions**
Input	Select Admin Menu Select Terms & Conditions Select 'Web Site' Click on 'Create New' Enter Title, Content Click on Preview Terms & Conditions
Expected Output	User should be able to see the display format of the terms & conditions.
Actual Result	**The user is able to see the display format of the terms and conditions.**

103. Add Terms & Conditions

Test Case ID	Test Case Description
ITS_ADM	New Terms and Conditions can be created for Website.
Pre-Condition	
Test Script Name	**Add Terms & Conditions**
Input	Select Admin Menu Select Terms & Conditions Select 'Web Site' Click on 'Create New' Enter Title, Content Click on Add New
Expected Output	User should be able to add New Terms & Conditions.
Actual Result	**The user is able to add new terms and conditions.**

104. View Terms & Conditions

Test Case ID	Test Case Description
ITS_ADM	New Terms and Conditions can be created for Registry (for view)

Pre-Condition	
Test Script Name	**View Terms & Conditions**
Input	Select Admin Menu Select Terms & Conditions Select 'Web Site' Click on 'Create New' Enter Title, Content Click on Preview Terms & Conditions
Expected Output	User should be able to see the display format of the terms & conditions for Registry
Actual Result	**The user is able to see the display format of the terms and conditions.**

105. Create Terms & Conditions

Test Case ID	Test Case Description
ITS_ADM	New Terms and Conditions can be created for Registry.
Pre-Condition	
Test Script Name	**Create Terms & Conditions**
Input	Select Admin Menu Select Terms & Conditions Select 'Web Site' Click on 'Create New' Enter Title, Content Click on Preview Terms & Conditions
Expected Output	User should be able to create new format of the terms & conditions.
Actual Result	**The user is able to create new format of the terms and conditions.**

106. Suspend Access

Test Case ID	Test Case Description
ITS_ADM	In the case Suspend Access a news page item informing users why they are unable to log-in. (For Registry)
Pre-Condition	Approved Register should be in Data Base
Test Script Name	**Suspend Access** -
Input	Select Admin Menu Select Suspend Access Select Disable Access Click on Update
Expected Output	The users should not be able to access the site.
Actual Result	**The user is able to access the site.**

107. CITL Operation Suspend Access

Test Case ID	Test Case Description
ITS_ADM	In the case Suspend Access, it will cease all operations to the CITL
Pre-Condition	Approved Register should be in Data Base
Test Script Name	**CITL Operation Suspend Access** -
Input	Select Admin Menu Select Suspend Access Select Suspend

Expected Output	All operation to the CITL should be ceased.
Actual Result	**All operation to the CITL is ceased.**

108. News Page Management

Test Case ID	Test Case Description
ITS_ADM	News Page Management.
Pre-Condition	
Test Script Name	**News Page Management**
Input	Select Admin Menu Select News Page Management Click on asterisk Insert Title & content in Body section Insert From & To date Select Priority Select sections & Groups Click on 'Save' button
Expected Output	New item should be saved for specific Sections and Groups
Actual Result	**New item is saved for specific sections and groups.**

109. Insert New Item

Test Case ID	Test Case Description
ITS_ADM	News Page Sections Management.
Pre-Condition	
Test Script Name	**NA**
Input	Select Admin Menu Select News Page Management Click on Pencil Icon to edit Insert News Page Name Click on tick icon to save
Expected Output	New item should be saved.
Actual Result	**New item is saved.**

110. Revoke Permit (Search)

Test Case ID	Test Case Description
ITS_ADM	Accounts covered by a revoked permit can be revoked (Search)
Pre-Condition	There should be accounts covered by a revoked permit should be closed on 30th June the year after the revocation took place. The organization need to be revoked can be searched.
Test Script Name	**Revoke Permit**
Input	Select Admin Menu Select Revoke Permit Insert Permit ID or Choose 'All Permits' Click Search
Expected Output	The Organization against given Permit ID should be displayed.
Actual Result	**The permit id is displayed.**

111. Revoked Permit

Test Case ID	Test Case Description
ITS_ADM	Accounts covered by a revoked permit can be revoked.

Pre-Condition	The data of the organization should be in system for which Revoke Permit will run.
Test Script Name	**Revoked Permit** -
Input	Select Admin Menu Select Revoke Permit Insert Permit ID or Choose 'All Permits' Click Search Click on Pencil Icon Click on Subsequent Pencil Icon to see PAR & SAR Click on Revoke Permit
Expected Output	The Organization against given Permit ID which was de-activated should be revoked.
Actual Result	**The permit id is deactivated and revoked.**

112. Register Shell Operator

Test Case ID	Test Case Description
ITS_ADM	A shell operator is a legal entity set up with two users. Register Shell Operator.
Pre-Condition	
Test Script Name	**Register Shell Operator**
Input	Select Admin Menu Select Register Shell Operator Click on Next Insert organizational, primary & secondary representative details. Click on Submit
Expected Output	The intended shell operator should be in proposed state in system
Actual Result	**The intended shell operator is in proposed state in the system.**

113. Approve Shell Operator

Test Case ID	Test Case Description
ITS_ADM	Approval of Shell Operator
Pre-Condition	Data for the Shell Operator need to be in Proposed State
Test Script Name	**Approve Shell Operator**
Input	Login the System Select Work Queue Click on Pencil Icon Click on Approve Button
Expected Output	The proposed state of Shell Operator should be approved.
Actual Result	**The proposed state of shell operator is approved.**

114. Register Regulation Organization

Test Case ID	Test Case Description
ITS_ADM	Registration of Regular Organization for Account Group to allow Administrative Users to be created under them. These Administrative Users should be Regulators who have access to accounts assigned to the Account Group.
Pre-Condition	Select Admin Menu Select Register Regulator Organization

	Insert Organizational Details
Test Script Name	**Register Regulation Organization**
Input	
Expected Output	A new Organization with the ID should be created successfully
Actual Result	**New organization id is created successfully.**

115. Change Default Admin User

Test Case ID	Test Case Description
ITS_ADM	Changing of Default Administrator.
Pre-Condition	The data of different Administrators will be data base
Test Script Name	**Change Default Admin User -**
Input	Select Admin Menu Select Change Default Admin User Select New User Click on 'Change Default Admin User'
Expected Output	User should be able to change Default Admin User.
Actual Result	**User is able to change default admin user.**

116. Maintain Account Groups

Test Case ID	Test Case Description
ITS_ADM	Creation of Account Group
Pre-Condition	
Test Script Name	**Maintain Account Description**
Input	Select Admin Menu Select Maintain Account Groups Insert Name, Description Click on Save
Expected Output	The account Group will be created.
Actual Result	**The account group is created successfully.**

117. Record Other Registry Operators

Test Case ID	Test Case Description
ITS_ADM	Recording other Registry Parameters – update of Base Emissions
Pre-Condition	A base emission value should be in system.
Test Script Name	**Record Other Registry Operators -**
Input	Select Admin Menu Select Record Other Registry Parameters Edit value of Base Emissions Click on Update
Expected Output	The parameter value will be changed
Actual Result	**The parameter value is changed successfully.**

Register an Operator *(Before starting this test, ensure that NAP table has been uploaded)*

Test Case ID	Script	Expected Result	Actual Result	Tester
	General			
1	On the public homepage, click "register for an Operator Holding Account"	Blank application form opens	As expected	SK
2	Click Next	Error message lists each mandatory field	As expected	SK
3	Complete each mandatory field with correct data, click Next	Data is accepted, Account Name page opens	As expected	SK
4	Repeat for each page	Every mandatory field is marked with a red asterisk	As expected	SK
5		Once correct data has been entered in each marked field, it is possible to open the next page	As expected	SK
6	When all pages have been completed, click Apply	Confirmation of user IDs for Primary and Secondary Reps is displayed	As expected	SK
7	Log on as Admin user, view Work Queue	Application for Operator Holding Account is marked on the queue as Pending	As expected	SK
8	Click Pencil icon	Approval page opens	As expected	SK
9	The following details are as entered on the application form:	Organisation name and address	As expected	SK
10		Account name	As expected	SK
11		Installation name	As expected	SK
12		Permit number (UK only)	As expected	SK
13		First user, defaults to PAR	As expected	SK
14		Second user, defaults to SAR	As expected	SK
15	Click Approve	Confirmation of approval ("successfully proposed") is displayed at the top of the page	As expected	SK
16	View email. Confirm that the following emails have been received:	Confirmation of approval of Account application	As expected	SK
17		CITL approval of account application (2 emails)	As expected	SK
18		Password for Primary user	As expected	SK
19		Password for Secondary user	As expected	SK
20	Log on as Primary user	"Confirm details" page opens	As expected	SK
21		All details are correct, as entered on the Application form	As expected	SK
22	Click Installation Details	Installation details are displayed correctly	As expected	SK
23	Click Continue	"Change Password" page opens	As expected	SK
24	Click Confirm	Error message lists each mandatory field	As expected	SK

Register an Operator *(Before starting this test, ensure that NAP table has been uploaded)*

25	Enter old and new passwords, click Continue (NB, new password must contain at least 1 letter and at least 1 number)	New password accepted	As expected	SK
26		Email is sent to confirm password change	As expected	SK
27	Log off, log back in with new password	Login successful	As expected	SK
28		Homepage lists the correct account under "All Accessible accounts"	As expected	SK
29		No other accounts are visible	As expected	SK
30		No Admin-user functions are available	As expected	SK
31	Repeat for Secondary user	No differences in results	As expected	SK
32		Secondary user is required to set Security Questions of their own	As expected	SK
33	**Register a Verifier**			
34	On the public homepage, click on "Register as a Verifier"	Blank registration form opens	As expected	SK
35	Click Next	Error message lists each mandatory field	As expected	SK
36	Complete each mandatory field with correct data, click Next	Data is accepted, Account Name page opens	As expected	SK
37	Repeat for each page	Every mandatory field is marked with a red asterisk	As expected	SK
38		Once correct data has been entered in each marked field, it is possible to open the next page	As expected	SK
39	When all pages have been completed, click Apply	Confirmation of user ID is displayed	As expected	SK
40	Log on as Admin user, view Work Queue	Application for Verifier is marked on the queue as Pending	As expected	SK
41	Click Pencil icon	Approval page opens	As expected	SK
42	View details on Approval page	All details are as entered on the Application form	As expected	SK
43	Click Approve	Confirmation of approval is displayed at the top of the page	As expected	SK
44	View email	Password has been sent to the verifier's email address	As expected	SK
45	Log on as Verifier	"Confirm details" page opens	As expected	SK
46		All details are correct, as entered on the Application form	As expected	SK
47	Click Continue	"Change Password" page opens	As expected	SK
48	Click Confirm	Error message lists each mandatory field	As expected	SK
49	Enter old and new passwords, click Continue (NB, new password must contain at least 1 letter and at least 1 number)	New password accepted	As expected	SK
50		Email is sent to confirm password change	As expected	SK
51	Log off, log back in with new password	Login successful	As expected	SK

52	**Register a Person Holding Account**			
53	On the public homepage, click on "Register a Person Holding Account"	Blank registration form opens	As expected	SK
54	Click Next	Error message lists each mandatory field	As expected	SK
55	Complete each mandatory field with correct data, click Next	Data is accepted, Account Name page opens	As expected	SK
56	Repeat for each page	Every mandatory field is marked with a red asterisk	As expected	SK
57		Once correct data has been entered in each marked field, it is possible to open the next page	As expected	SK
58	When all pages have been completed, click Apply	Confirmation of user ID is displayed	As expected	SK
59	Log on as Admin user, view Work Queue	Application for Person Holding Account is marked on the queue as Pending	As expected	SK
60	Click Pencil icon	Approval page opens	As expected	SK
61	The following details are as entered on the application form:	Organisation name and address	As expected	SK
62		Account name	As expected	SK
63		Installation name	As expected	SK
64		First user, defaults to PAR	As expected	SK
65		Second user, defaults to SAR	As expected	SK
66	Click Approve	Confirmation of approval ("successfully proposed") is displayed at the top of the page	As expected	SK
67	View email. Confirm that the following emails have been received:	Confirmation of approval of Account application	As expected	SK
68		CITL approval of account application (2 emails)	As expected	SK
69		Password for Primary user	As expected	SK
70		Password for Secondary user	As expected	SK
71	Log on as Primary user	"Confirm details" page opens	As expected	SK
72		All details are correct, as entered on the Application form	As expected	SK
73	Click Continue	"Change Password" page opens	As expected	SK
74	Click Confirm	Error message lists each mandatory field	As expected	SK
75	Enter old and new passwords, click Continue (NB, new password must contain at least 1 letter and at least 1 number)	New password accepted	As expected	SK
76		Email is sent to confirm password change	As expected	SK
77	Log off, log back in with new password	Login successful	As expected	SK
78		Homepage lists the correct account under "All Accessible accounts"	As expected	SK

79		No other accounts are visible	As expected	SK
80		No Admin-user functions are available	As expected	SK
81	Repeat for Secondary user	No differences in results	As expected	SK
82		Secondary user is required to set Security Questions of their own	As expected	SK
83	**Register an External AAR**			
84	On the public homepage, click on "Register an External AAR Organisation"	Blank registration form opens	As expected	SK
85	Click Next	Error message lists each mandatory field	As expected	SK
86	Complete each mandatory field with correct data, click Next	Data is accepted, Account Name page opens	As expected	SK
87	Repeat for each page	Every mandatory field is marked with a red asterisk	As expected	SK
88		Once correct data has been entered in each marked field, it is possible to open the next page	As expected	SK
89	When all pages have been completed, click Apply	Confirmation of user ID is displayed	As expected	SK
90	Log on as Admin user, view Work Queue	Application for AAR Account is marked on the queue as Pending	As expected	SK
91	Click Pencil icon	Approval page opens	As expected	SK
92	The following details are as entered on the application form:	Organisation name and address	As expected	SK
93		Account name	As expected	SK
94	Click Approve	Confirmation of approval is displayed at the top of the page	As expected	SK
95	View email	Password has been sent to the AAR's email address	As expected	SK
96	Log on as AAR	"Confirm details" page opens	As expected	SK
97		All details are correct, as entered on the Application form	As expected	SK
98	Click Continue	"Change Password" page opens	As expected	SK
99	Click Confirm	Error message lists each mandatory field	As expected	SK
100	Enter old and new passwords, click Continue (NB, new password must contain at least 1 letter and at least 1 number)	New password accepted	As expected	SK
101		Email is sent to confirm password change	As expected	SK
102	Log off, log back in with new password	Login successful	As expected	SK
103		No User functions are available	As expected	SK
104	**Register an Internal AAR**			

105	Log in as Admin user From the Users tab, select Manage Users/Request A New Uuser (for full test, see Manage Users/Request New User, below) Select test Person Holding Account Complete all fields On "Is this user an AAR?", select Yes Click Confirm	Advisory message confirms that the user request has been sent to Admin for approval	As expected	SK
106	Log on as Admin user, view Work Queue	Request for New User is marked on the queue as Pending	As expected	SK
107	Click Pencil icon	Approval page opens	As expected	SK
108	The following details are as entered on the application form:	Organisation name and address	As expected	SK
109		Account name	As expected	SK
110	Click Approve	Confirmation of approval is displayed at the top of the page	As expected	SK
111	View email	Password has been sent to the AAR's email address	As expected	SK
112	Log on as Internal AAR	"Confirm details" page opens	As expected	SK
113		All details are correct, as entered on the Application form	As expected	SK
114	Complete Security Questions Click Continue	"Change Password" page opens	As expected	SK
115	Click Continue	"Change Password" page opens	As expected	SK
116	Click Confirm	Error message lists each mandatory field	As expected	SK
117	Enter old and new passwords, click Continue (NB, new password must contain at least 1 letter and at least 1 number)	New password accepted	As expected	SK
118		Email is sent to confirm password change	As expected	SK
119	Log off, log back in with new password	Login successful	As expected	SK
120		No User functions are available	As expected	SK
121	**Register a Shell Operator**			
122	Log on as Admin user eta01 From the Admin menu, select Register Shell Operator	Blank Shell Operator form opens	As expected	SK
123	Complete all mandatory fields, submit application View Work Queue	Application is visible in work queue	As expected	SK
124	Approve application	Not permitted. Has to be approved by a different Admin user	As expected	SK
125	Log on as Admin user eta02 View Work Queue	Application is visible in work queue	As expected	SK
126	Approve application	Application successfully approved	As expected	SK
127	View email	Passwords have been sent to the PAR and SAR	As expected	SK
128	**Manage Users**			

129	**Request new user**			
130	Log on as Admin User. From the Users tab, select Manage Users/Request New User	The process requires that an entity is selected first	As expected	SK
131	Search for all entities, select the Person Holding organisation created in earlier test	Blank New User form opens	As expected	SK
132	Complete all mandatory fields Leave "Is this user an AAR?" as No Click Confirm	Advisory message states that user application has been sent to the Registry Admin for approval	As expected	SK
133	Click Continue	Promote/Demote Users page opens	As expected	SK
134		New user is listed in the Users section	As expected	SK
135		New user's status is "Pending"	As expected	SK
136	Click the Pencil icon against the new user	User's row activates	As expected	SK
137	Select Person-Organisation, and click the Tick icon Confirm action	Change of User Access is saved OK	As expected	SK
138	View Work Queue Select New User	All details are correct, as entered on the Application form	As expected	SK
139	Click Approve	An advisory message quotes the new user's username	As expected	SK
140	Check email	Password has been sent to the new user	As expected	SK
141	Log on as new user	"Confirm details" page opens	As expected	SK
142		All details are correct, as entered on the Application form	As expected	SK
143	Complete Security Questions Click Continue	"Change Password" page opens	As expected	SK
144	Click Confirm	Error message lists each mandatory field	As expected	SK
145	Enter old and new passwords, click Continue (NB, new password must contain at least 1 letter and at least 1 number)	New password accepted	As expected	SK
146		Email is sent to confirm password change	As expected	SK
147	Log off, log back in with new password	Login successful	As expected	SK
148	**Appoint PAR/SAR**			
149	Create and approve a new user, as above **NEW USER DOES NOT LOG IN** On Accounts tab, select Update Account Details Search for and select the Person Holding Account created in the earlier test Click the Arrow icon for account details Click Edit Account Details Click Update Relationships	The new user is listed in the Account Representatives section	As expected	SK

150	Against the new user's row, select the SAR radio button Click "Change Current Account Representatives"	The new user is now the Secondary Account Representative for the Test Person Holding Account	As expected	SK
151	Return to the Account Details Page Click "Submit All Changes"	New user is now displayed as the SAR on the Account Details page	As expected	SK
152	Repeat, using the first New User	Can also be appointed as a PAR or SAR (log-on status doesn't matter)	As expected	SK
153	**Delete User**			
154	Log on as Admin User Remove the first New User from their PAR/SAR appointment, submit all changes From the Users tab, select Manage Users/Delete User Unless already selected, select Test Person Holding Organisation	All users currently assigned to the selected entity are listed in the Users section	As expected	SK
155			After selecting a different PAR/SAR to replace the user to be deleted, the amended Account Rep field is always blank on the Summary page, until the Update Account Details function is called again. This has occurred on all tests to date.	SK
156		Each user has an active Delete button	As expected	SK
157	Click the Delete button beside the first New User	User's details are displayed correctly	As expected	SK
158		Cancel and Confirm buttons are active at the bottom of the page	As expected	SK
159	Click Confirm	Advisory message confirms successful deletion of the user	As expected	SK
160	On the Accounts tab, select View Account Display full details	Deleted user is still listed	As expected	SK
161	Click Update Account Details Click Update Relationships	Deleted user no longer listed on the Relationships section	As expected	SK
162	Log on as deleted New User	Access denied Warning message: "User's status is not active"	As expected	SK
163	View email	Confirmation of deletion received by deleted user	As expected	SK

164	**Upload NAP Data** *(this step must be carried out before any other testing can proceed)*			
165	Log on as Admin User. On the Admin tab, select "Upload NAP Data"	If the spreadsheet has been uploaded prior to testing, the four command buttons are active	As expected	SK
166		If the spreadsheet has not been uploaded, there is an "Action Failed" error message, and the command buttons are not available	As expected	SK
167	Clear the "Require Approval" tickbox on Step One, then click all four buttons in turn	No errors	As expected	SK
168	View email. Confirm that the following emails have been received:	Confirmation of successful NAP Upload	As expected	SK
169		New User for Sample Operator 1 and 2, with passwords	As expected	SK
170		Secondary users for Sample Operators 1 and 2, with passwords	As expected	SK
171		Account Approval for Sample Operator 1	As expected	SK
172		CITL Approval for Sample Operator 1 (2 emails)	As expected	SK
173		Account Approval for Sample Operator 2	As expected	SK
174		CITL Approval for Sample Operator 2 (2 emails)	As expected	SK
175	On the Accounts tab, select View Account and search for All Legal Entities View list	Two new sample operators, 1 and 2, have been created	As expected	SK
176	Click the Arrow icon beside Sample Operator 1 for more details View details of:	Two account representatives (PAR and SAR)	As expected	SK
177		Permit number	As expected	SK
178		Installation	As expected	SK
179	Select "Display Balance Details"	No details found	As expected	SK
180	Log on as PAR	"Confirm Details" page opens	As expected	SK
181	Click Correct	Change Password page opens	As expected	SK
182	Click Confirm	Error message lists each mandatory field	As expected	SK
183	Enter old and new passwords, click Continue (NB, new password must contain at least 1 letter and at least 1 number)	New password accepted	As expected	SK
184		Email is sent to confirm password change	As expected	SK
185	Log off, log back in with new password	Login successful	As expected	SK

186	**Create National Holding, Retirement and Cancellation Accounts**			
187	Log on as Admin user From the Accounts tab, select "Open New Account"	System prompts for a legal entity to be selected	As expected	SK
188	Search for and select DEFRA	Blank New Account page opens	As expected	SK
189	Select Account Type "National Holding (Party)" Enter a meaningful account name Select a PAR and SAR from the picklist	Account name is mandatory PAR and SAR can't be the same	As expected	SK
190	Click Open Account	Advisory message confirms creation of account	As expected	SK
191	Repeat, selecting Voluntary Cancellation as the Account Type	New field is displayed at the bottom of the page: "Commitment Period"	As expected	SK
192	Complete mandatory fields Select "Pre-Kyoto Period" from the Commitment Period picklist Click Open Account	Cancellation account successfully created	As expected	SK
193	Repeat, selecting Retirement Account as the Account Type, and "Pre-Kyoto" as the Commitment Period	Retirement account successfully created	As expected	SK
194	Create Retirement and Cancellation accounts for First Commitment Period	Accounts created successfully	As expected	SK
195	Click View Account, select DEFRA	Each new account is displayed against the DEFRA organisation	As expected	SK
196		Each new Account is at Pending status	As expected	SK
197	View email. Confirm that the following emails have been received:	Account Open Requests for each new account	As expected	SK
198	View Work Queue	5 new accounts are awaiting approval	As expected	SK
199	Select the National Holding Account and click Approve	Advisory message confirms proposal of account Account is awaiting CITL Approval	As expected	SK
200		Nat Holding Account is now at Proposed status	As expected	SK
201	View email. Confirm that the following emails have been received:	Approval of Nat Holding Account	As expected	SK
202		Confirmation of CITL approval (an email sent to each Account Representative)	As expected	SK
203	View Account Search for and select DEFRA (in order to refresh the account details)	Nat Holding Account is now Active	As expected	SK
204				
205	From Work Queue, select and approve the Retirement and Cancellation accounts	All accounts now active	As expected	SK

206	**Create Operator and Person Holding Accounts**			
207	Log on as Admin user From the Accounts tab, select "Open New Account"	System prompts for a legal entity to be selected	As expected	SK
208	Search for and select DEFRA	Blank New Account page opens	As expected	SK
209	Select Account Type "Operator Holding" Enter a meaningful account name Select a PAR and SAR from the picklist	Account name is mandatory PAR and SAR can't be the same	As expected	SK
210	Click Open Account	Permit page opens	As expected	SK
211	Complete mandatory fields Click Add Installation Permit Account	Advisory message confirms creation of account	As expected	SK
212	View email	Account Open Request received	As expected	SK
213	From Work Queue, select and approve the Operator Holding account	Advisory message confirms proposal of account Account is awaiting CITL Approval	As expected	SK
214	View email	Confirmation of approval	As expected	SK
215		Confirmation of CITL approval (an email sent to each Account Representative)	As expected	SK
216	Repeat, selecting Person Holding as the Account Type	A set of tickboxes for Account Group is displayed at the bottom of the page	As expected	SK
217	Select DOENI Click Open Account	Advisory message confirms creation of account	As expected	SK
218	From Work Queue, select and approve the Person Holding account	Advisory message confirms proposal of account Account is awaiting CITL Approval	As expected	SK
219	View email	Confirmation of approval	As expected	SK
220		Confirmation of CITL approval (an email sent to each Account Representative)	As expected	SK
221	View Account Search for and select DEFRA (in order to refresh the account details)	Operator and Person Accounts are now Active	As expected	SK
222	**Bulk Upload New Operators**			
223	Log on as Admin User From the Admin tab, select Bulk Upload New Operators	Introductory page opens	As expected	SK
224			As expected	SK
225	Click Accept Browse for upload file, and select Click Upload	Administrator approval page opens	As expected	SK
226	Leave the "Approval Required" tickbox blank (No authorisation required) Click Continue	A further Continue/Cancel prompt is displayed	As expected	SK
227	Click Continue	Termination page opens, confirming upload of new operators	As expected	SK
228	View Work Queue	New operator is not displayed in the Work Queue	As expected	SK

229	From the Users tab, select Manage All Users/Find User Accounts Search for the new user accounts, using the surnames specified in the Bulk Upload file	Usernames found and identified	As expected	SK
230	View email. Check that the following emails have been received:	Confirmation of successful bulk upload	As expected	SK
231		Passwords to PAR and AAR	As expected	SK
232		Confirmation of approval of the uploaded account	As expected	SK
233		Confirmation of CITL approval (2 emails - to PAR and SAR)	As expected	SK
234	On the Accounts tab, select View Accounts Search for All Accounts	The uploaded operator is visible on the list of accessible accounts	As expected	SK
235	Log on as PAR of new account	"Confirm Details" page opens	As expected	SK
236	Click Correct	Change Password page opens	As expected	SK
237	Click Confirm	Error message lists each mandatory field	As expected	SK
238	Enter old and new passwords, click Continue (NB, new password must contain at least 1 letter and at least 1 number)	New password accepted	As expected	SK
239		Email is sent to confirm password change	As expected	SK
240	Log off, log back in with new password	Login successful	As expected	SK
241	**Issuance**			
242	**Propose Issuance**			
243	Log on as Admin user On the "Issuance and NAP" tab, select Propose Issuance	Prompt to select a legal entity	As expected	SK
244	Search for and select DEFRA, National Holding Account	Propose Issuance page opens	As expected	SK
245		Number of Units is the amount specified in the NAP table (read-only)	As expected	SK
246		Commitment Period is Pre-Kyoto (read-only)	As expected	SK
247		Country of Origin is UK (read-only)	As expected	SK
248	Click Submit Request	Remarks' field is mandatory Advisory message confirms that the request has been sent to the Admin User for approval	As expected	SK
249	View Work Queue	Issuance Request is awaiting approval	As expected	SK
250	Select and approve the Issuance Request	Issuance Request is approved and sent to the Transaction Log	As expected	SK
251	From the Accounts tab, select View Account Locate and select DEFRA, National Holding Account	Details of Issuance displayed in the Account Activity section	As expected	SK

252	On the Accounts tab, select Display Balance Details Search for and select DEFRA, National Holding Account	100000 EU Allowances are displayed for the pre-Kyoto period	As expected	SK
253	Click on 100000 EUA figure	Unit Details are displayed	As expected	SK
254		The units have the status of "Proposed"	As expected	SK
255	View email. Check that the following emails have been received:	Confirmation that the Proposed Issuance has been sent to the Transaction log	As expected	SK
256		CITL approval of issuance	As expected	SK
257	View Balance Details	The units have the status of "Active"	As expected	SK
258	**National Allocation**			
259	From 'Issuance' tab select 'National Allocation' Select year 2005 Click 'Assign Now'	Allowances are transferred to each of the Operator Holding Accounts	As expected	SK
260	From the Accounts tab, select View Account Locate and select DEFRA, National Holding Account	Details of Internal Transfers displayed in the Account Activity section	As expected	SK
261	Repeat for 2006 and 2007	Allowances are transferred to each of the Operator Holding Accounts, as above	As expected	SK
262	Select Sample Operator 1 and View Balance	3 allocations of 10000	As expected	SK
263	Select Sample Operator 2 and View Balance	3 allocations of 15000	As expected	SK
264	**National Allocation Details**			
265	On the Issuance & NAP tab, select National Allocation Details Select year 2005 View All Allocations	10000 units have been allocated to Sample Operator 1 15000 units have been allocated to Sample Operator 2	As expected	SK
266	View Allocated	Allocations to Sample Operator 1 and 2 are listed, as per All Allocations	As expected	SK
267	View Errors	No errors listed	As expected	SK
268	View Unallocated	No unallocated accounts listed	As expected	SK
269	Repeat for 2006 and 2007	The same amounts have been allocated to the same operators for each year of Period 0	As expected	SK
270	**Amend National Allocation**	*(Dependent on amended NAP table being uploaded by Kyoto helpdesk)*		
271	Amend test-data file "Amend National Alloc.xml -	Anemd National Allocation	As expected	SK
272	ensure that the Registry, Permit ID and Installtion ID are correct for Sample Operator 2	Check Registry, Permit ID & Installtion ID	As expected	SK
273	that the allocatoin figure for 2005 is 2000	Check for Allocation figures	As expected	SK
274	Send XML file to Kyoto Helpdesk at the above adress. Awaiting confirmation of upload before continuing	Send XML file to Kyoto Helpdesk before upload	As expected	SK

275	Select 'Amend National Allocation' from 'Issuance' menu	Blank Search form opens	As expected	SK
276	Enter search criteria for Sample Operator 2 (e.g. Permit ID GB-ETS-P2, Installation ID GB-2) Click Search	All accounts/installations meeting the search criteria are displayed	As expected	SK
277	Select Sample Operator 2, Operator Account Select the Allocation row for 2005	Row becomes editable	As expected	SK
278	Enter correction of 2000 units to Operator 2 allocated amount for 2005 Click the Tick icon	System prompts to select Cancellation, Transfer to New Entrant Reserve, or Abort	As expected	SK
279	Select Cancellation Select the National Holding Account	13000 allowances cancelled from the Party Holding Account	As expected	SK
280	On the Account tab, locate and select DEFRA View All Accessible Accounts	Cancellation account now holds 13000 units	As expected	SK
281		National Holding Account has been reduced by 13000	As expected	SK
282	**Manual Allocation**	*(Dependent on amended NAP table being uploaded by Kyoto helpdesk)*		
283	Amend test-data file "Manual Alloc.xml" as follows:	Anemd National Allocation	As expected	SK
284	Ensure that the Registry, Permit ID and Installtion ID are correct for Sample Operator 1	Check Registry, Permit ID & Installtion ID	As expected	SK
285	that the allocatoin figure for 2005 is 12000	Check for Allocation figures	As expected	SK
286	Send XML file to Kyoto Helpdesk at the above adress. Awaiting confirmation of upload before continuing	Send XML file to Kyoto Helpdesk before upload	As expected	SK
287	Log in as Admin User eta01. On the Issuance & Nap tab, select Propose Manual Allocation. Locate and select the DEFRA National Holding Account	Blank field opens for the Acquiring Installation number	As expected	SK
288	Enter the Installation ID for Sample Operator 1 and click Get Acquirer Details	The correct details of the installation, organisation and account reps are displayed	As expected	SK
289	Enter year 2005 Enter amount 2000 Click Submit Allocation	Submission successful	As expected	SK
290	View email	Notification email has been sent to Admin User {?}	As expected	SK
291	View Work Queue	Manual Allocation proposal is now on the Work Queue	As expected	SK
292	Select and approve the Manual Allocation Request	Not permitted. Has to be approved by a different admin user	As expected	SK
293	Log in as Admin User eta02 View Work Queue and select the Manual Allocation proposal	All Allocation details are correctly displayed	As expected	SK

294	Click Approve	Advisory message confirms that approval has been sent to CITL	As expected	SK
295	On View Account page, view details of test operator account	2000 units have been credited to the account	As expected	SK
296	Select View Balance Details	The 2000 units have the status of Active	As expected	SK
297	**Add to NAP**	*(Dependent on amended NAP table being uploaded by Kyoto helpdesk)*		
298	Amend test-data file "Add to NAP.xml" as follows:	Anemd National Allocation	As expected	SK
299	Ensure that the Registry, Permit ID and Installtion ID are correct for Test Operator Holding Account	Check Registry, Permit ID & Installtion ID	As expected	SK
300	that the allocatoin figure for 2005 is 100, 2006 = 200 and 2007 = 300	Check for Allocation figures	As expected	SK
301	Send XML file to Kyoto Helpdesk at the above adress. Awaiting confirmation of upload before continuing	Send XML file to Kyoto Helpdesk before upload	As expected	SK
302	Enter Installation ID number of test Operator Holding Account Click Get Details	Details of the Organisation are displayed correctly in the Installation Details section	As expected	SK
303	In Yearly Allocation, enter: 100 for 2005 200 for 2006 300 for 2007 Click Add	NAP Entries section opens, displaying correct allocation amounts against the correct Installation/Organisation details	As expected	SK
304	Click Submit	National Holding Account is listed in the Party Holding Account picklist The Submit button has changed to Confirm	As expected	SK
305	Click Confirm	Advisory message confirms successful submission	As expected	SK
306	View Work Queue	Add To NAP proposal is awaiting approval	As expected	SK
307	Select and approve	Not permitted. Approval must be done by a different Admin user	As expected	SK
308	Log on as Admin User eta02 View Work Queue Select and approve Add To NAP proposal	Advisory message confirms that approval has been sent to CITL	As expected	SK
309	View email	CITL confirmation message	As expected	SK
310	From the Issuance tab, select National Allocation Select the DEFRA/National Holding Account	National Holding Account balance has increased by 600 (the amount specified on the Add To NAP page)	As expected	SK
311	Select year 2005, click Assign Now	Updated allocation is sent to CITL for approval	As expected	SK
312	Repeat for 2006 and 2007	CITL approvals are issued for each year	As expected	SK

313	On the Accounts tab, select Display Balance Details Locate and select test Operator Holding Account View details of balance	Balance has increased by 100	As expected	SK
314	View Account Details	Account Activity lists the extra allocation	As expected	SK
315	**Manage Accounts**			
316	**Appoint Verifier**			
317	Ensure that a Verifier account exists Log on as Admin user On the Accounts tab, select Appoint Verifier Locate and select Sample Operator 1	Available Verifier accounts are listed in the "System Verifiers" section	As expected	SK
318	Click Select Verifier button	Selection is successful	As expected	SK
319	View email	A notification has been sent to the Verifier's email address	As expected	SK
320	Log on as Verifier user On the Compliance tab, select "View Verifier Appointments"	Details of the account used in step 1 are listed in the "Associated Account(s) Details" section	As expected	SK
321	Log on as Admin user On the Compliance tab, select "View Verifier Appointments" Locate and select Verifier	Details of the account used in step 1 are listed in the "Associated Account(s) Details" section	As expected	SK
322	Repeat, appointing Verifier to Sample Operator 2 and the Test Operating Account created in section "Create Operator and Person Holding Accounts"	Verifier successfully appointed to both accounts	As expected	SK
323	View Verifier Appointments	All three accounts are shown, with correct details	As expected	SK
324	**Change/Remove Verifier**			
325	Ensure that Verifier 1 has been appointed to 3 accounts as above Ensure that Sample Operator 1 and Sample Operator 2 have outstanding emission proposals, the third account does not Log on as Verifier 1, review Verifier Appointments and Emissions History	Sample Operator 1 and 2, and Test operator, are listed in Associated Accounts	As expected	SK
326		Pending proposals can be found in Emissions History for Installation IDs of both Sample Operator 1 and 2	As expected	SK
327	Log on as Admin user Create Verifier 2, assign to Sample Operator 1	Details of Verifier 2 replace Verifier 1's details in the My Existing Account Verifiers section	As expected	SK
328	View email	Verifier 1 has received an email confirming that they are no longer the Verifier of Sample Operator 1	As expected	SK
329	Log as on as Verifier 1, review Verifier Appointments	Sample Operator 1 is no longer on the list of Associated Accounts	As expected	SK

330	On the Emissions History page, search for Installation ID of Sample Operator 1	Not found	As expected	SK
331	On the Emissions History page, search for Installation ID of Sample Operator 2	Found Displays 1 emissions proposal at Pending	As expected	SK
332	View Approve Emissions	Proposals from Sample Operators 1 and 2 are still available for approval	As expected	SK
333	Log on as Verifier 2, view Verifier Appointments	Sample Operator 1 appears in Associated Accounts	As expected	SK
334	View Emissions History	Sample Operator 1's proposal is displayed, at status Pending	As expected	SK
335	View Approve Emissions	Sample Operator 1's proposal is available for approval	As expected	SK
336	Log on as Admin User On the Compliance tab, select "View Verifier Appointments" Locate and select Verifier 1 Click Remove Verifier	"Reason" is a mandatory field	As expected	SK
337		NB - UK TEST SYSTEM IS SET NOT TO REQUIRE APPROVAL FOR VERIFIER REMOVAL Advisory message confirms that Verifier has been removed from the system	As expected	SK
338	View email	Notification of removal has been sent to PAR and SAR of the affected account	As expected	SK
339		Notification of removal from the system has been sent to the Verifier	As expected	SK
340		Notification of removal and list of affected emissions proposals has been sent to	As expected	SK
341	View outstanding emissions proposals	All rejected	As expected	SK
342	Log in as Verifier 1	Access denied	As expected	SK
343	**Update account details**			
344	Log on as Admin user. In the Accounts tab, click Update Account Details Locate and select the operator uploaded in the Bulk Upload test (above) Click the Arrow icon on the account's Basic Detail row to display more details	Account details match those specified in the upload file	As expected	SK
345	Click Edit Account Details	Account Type is read-only	As expected	SK
346		Account Name can be amended	As expected	SK
347		Relationships (PAR and SAR) can be changed	As expected	SK
348	Amend account name, click Update Confirm the update	Amended Account name is immediately visible in the Summary Details section	As expected	SK
349	Click Update Relationships	PAR and SAR details are displayed	As expected	SK

350	Switch the roles of the PAR and SAR Click "Change Current Account Representatives"	Advisory message confirms the update	As expected	SK
351	Click Back to Update Account	Amendments to PAR and SAR are visible on the Details page	As expected	SK
352	Click Edit Permit	Permit details section opens wit Permit number in an editable field	As expected	SK
353	Click Cancel	Permit section closes without change	As expected	SK
354	Click Edit Installation	Installation details section opens All fields editable	As expected	SK
355	Amend the Installation Contact name	PAR and SAR are both listed in the picklist	As expected	SK
356	Click Cancel	Change to Installation Contact is undone	As expected	SK
357	Click Submit All Updates	Advisory message confirms update	As expected	SK
358		Updates now awaiting CITL approval	As expected	SK
359	View Account, locate and select the amended account	All changes visible	As expected	SK
360	**Block/Unblock/Close accounts**			
361	Ensure that a test Operator Holding Account exists Log on as Admin User On the Accounts tab, select View Accounts Search for and select the test Operator Holding Account On the function menu, click Block/Unblock Account	The selected account's details are correctly displayed on the Block/Unblock page	As expected	SK
362		"Block Account" button is active at the bottom of the page	As expected	SK
363	Click Block Account	Advisory message confirms that account status has been amended	As expected	SK
364	In View Accounts, check status of account	Account is listed as Blocked	As expected	SK
365	View email	Emails confirming that the account is blocked have been sent to Admin user, PAR and SAR	As expected	SK
366	With the blocked account's details displayed, click Close Account	Not permitted. "Only active accounts can be closed"	As expected	SK
367	On the function menu, click Block/Unblock Account	The button at the bottom of the account's details now says "Unblock Account"	As expected	SK
368	Click Unblock Account	Advisory message confirms that account status has been amended	As expected	SK
369	In View Accounts, check status of account	Account is listed as Active	As expected	SK
370	View email	Emails confirming that the account is unblocked have been sent to Admin user, PAR and SAR	As expected	SK
371	Select the Bulk Uploaded operator Click Close Account on the function menu	The selected account's details are correctly displayed on the Close Account page	As expected	SK

372		"Close Account" button is active at the bottom of the page	As expected	SK
373	Click Close Account	Error message warns that Reason is mandatory	As expected	SK
374	Complete the Reason field, click Close Account	Advisory message confirms that account closure is pending CITL approval	As expected	SK
375	View email	Emails confirming CITL request and account closure have been sent to the Admin user	As expected	SK
376	In View Accounts, check status of account	Account is listed as Closed	As expected	SK
377	Ensure that a test Person Holding Account exists Log on as Admin User On the Accounts tab, select View Accounts Search for and select the test Person Holding Account On the function menu, click Block/Unblock Account	The selected account's details are correctly displayed on the Block/Unblock page	As expected	SK
378		"Block Account" button is active at the bottom of the page	As expected	SK
379	Click Block Account	Advisory message confirms that account status has been amended	As expected	SK
380	In View Accounts, check status of account	Account is listed as Blocked	As expected	SK
381	View email	Emails confirming that the account is blocked have been sent to Admin user, PAR and SAR	As expected	SK
382	With the blocked account's details displayed, click Close Account	Not permitted. "Only active accounts can be closed"	As expected	SK
383	On the function menu, click Block/Unblock Account	The button at the bottom of the account's details now says "Unblock Account"	As expected	SK
384	Click Unblock Account	Advisory message confirms that account status has been amended	As expected	SK
385	In View Accounts, check status of account	Account is listed as Active	As expected	SK
386	View email	Emails confirming that the account is unblocked have been sent to Admin user, PAR and SAR	As expected	SK
387	With the unblocked account's details displayed, click Close Account on the function menu	The selected account's details are correctly displayed on the Close Account page	As expected	SK
388		"Close Account" button is active at the bottom of the page	As expected	SK
389	Click Close Account	Error message warns that Reason is mandatory	As expected	SK
390	Complete the Reason field, click Close Account	Advisory message confirms that account closure is pending CITL approval	As expected	SK
391	View email	Emails confirming CITL request and account closure have been sent to the Admin user	As expected	SK

392	In View Accounts, check status of account	Account is listed as Closed	As expected	SK
393	Log on as Admin User Ensure that there is an Operator Holding Account containing allowances From the Accounts tab, select Block/Unblock Account Locate and select the required account Click Block Account	Permitted	As expected	SK
394		Advisory message confirms that account status has been amended	As expected	SK
395	In View Accounts, check status of account	Account is listed as Blocked	As expected	SK
396	View email	Emails confirming that the account is blocked have been sent to Admin user, PAR and SAR	As expected	SK
397	With the blocked account's details displayed, click Close Account	Not permitted. "Only active accounts can be closed"	As expected	SK
398	On the function menu, click Block/Unblock Account	The button at the bottom of the account's details now says "Unblock Account"	As expected	SK
399	Click Unblock Account	Advisory message confirms that account status has been amended	As expected	SK
400	In View Accounts, check status of account	Account is listed as Active	As expected	SK
401	View email	Emails confirming that the account is unblocked have been sent to Admin user, PAR and SAR	As expected	SK
402	With the unblocked account's details displayed, click Close Account on the function menu	Advisory message warns that accounts which still contain allowances can't be closed	As expected	SK
403	**Appoint AAR**			
404	Log in as Admin user From the Accounts tab, select "Appoint AAR"	Process requires that a legal entity needs to be selected first	As expected	SK
405	From the list of accounts, select the account against which the Internal AAR was created in test ,	Account opens, displaying correct details	As expected	SK
406	Click the Arrow icon to display AAR details Select "AAR Approvers" view Select "View Internal AARs"	The test Internal AAR created in the User tests is displayed	As expected	SK
407	Select a different account, return to "Appoint AAR"	The Internal AAR is only displayed when the Account against which the AAR was created is selected	As expected	SK
408	Toggle to "View External AARs"	The test External AAR created in the General tests is displayed	As expected	SK
409	Appoint Internal AAR to the appropriate account Do not set as Approver	Appointment successful	As expected	SK

410	Appoint External AAR to the test account, and to Sample Operator 1 On Sample Operator 1, set as Approver for Internal and External Transfers	Appointments successful	As expected	SK
411	View email	Verify Transaction Type notifications have been sent to PAR and SAR (? - not possible to tell who the recipients are on the test system)	As expected	SK
412		Notification emails have been sent to each Approver AAR	As expected	SK
413		Set AAR Approver' confirmations sent to ExtAAR and the PAR and SAR (?) of the Approver account	As expected	SK
414	Log on as External AAR user	Both accounts are visible in the Accessible Accounts list	As expected	SK
415	On the Admin tab, select AAR Acceptance Queue	Queue shows the account to which the ExtAAR has been appointed as Approver	As expected	SK
416	Select Approval Request account, click Arrow tab for more details	Full details of Approval Request are correctly displayed	As expected	SK
417	Click Approve Request	Advisory message confirms appointment	As expected	SK
418	View email	Acceptance confirmations sent to ExtAAR, PAR and SAR	As expected	SK
419	On the Admin tab, select AAR Queue	Queue is blank as no appropriate transactions have occurred	As expected	SK
420	Log on as Internal AAR user	Only one account is visible in the Accessible Accounts list	As expected	SK
421	On the Admin tab, select AAR Acceptance Queue	Queue is blank, as the IntAAR was not set to be an Approver during set-up	As expected	SK
422	On the Admin tab, select AAR Queue	Queue is blank	As expected	SK
423	**Installation Transfer**			
424	Log on as Admin user eta01 On the Accounts tab, locate the Shell Operator created in the earlier test, and note the OrgID number On the Accounts tab, select the test Operator Holding Account Select Propose Installation Transfer Locate and select the test account with the installation for transfer In the Acquirer Selection field, enter the number of the Shell Operator and click Get Details	Correct details displayed, as entered when the Shell Operator was created	As expected	SK
425	Click Continue	Transaction and Emission History transfer defaults to No	As expected	SK

426	Select "Transfer the Permit…" Click Additional Checks Click Submit Proposal, and confirm the transfer	An advisory message confirms that the transfer has been successfully proposed	As expected	SK
427	View email	Confirmation of proposed transfer has been sent to the PAR and SAR of the initiating organisation	As expected	SK
428	Log on as PAR of the Shell Operator	Transferred installation is visible and marked "awaiting approval"	As expected	SK
429	Select the transferred installation Click the Arrow icon for more details Set new PAR and SAR, click Accept Transfer	Advisory message confirms acceptance	As expected	SK
430		Transfer is awaiting Admin approval	As expected	SK
431	Log on as Admin User eta01 View Work Queue and select Transfer Proposal	Unable to approve: "…must be approved by a different administrator because it was proposal or accepted by you on behalf on the Acquiring operator"	As expected	SK
432	Log in as Admin User eta02 View Work Queue and select Transfer Proposal	Details of amended PAR and SAR are displayed correctly	As expected	SK
433		All other details correct	As expected	SK
434	Click Approve Transfer View emails:	Confirmation of CITL approval sent to PAR and SAR of originating operator	Rejected by CITL - Installation Main Activity out of range or in the wrong format. Known issue	SK
435		Confirmation of CITL approval sent to PAR and SAR of receiving operator	Unable to test	SK
436		Notification of completed transfer sent to	Unable to test	SK
437	Log on as PAR of originating operator	Transferred account/installation is no longer listed	Unable to test	SK
438	Log on as PAR of the Shell Operator	Account/installation now list as Active on the list of accessible accounts	Unable to test	SK
439	Select transferred account and view full details	Permit number is correct	Unable to test	SK
440		Account name is correct	Unable to test	SK
441		Installation ID and name are correct	Unable to test	SK
442		PAR and SAR details are correct	Unable to test	SK
443	Ensure that Verifier 1 is assigned to Sample Operator 1 and Sample Operator 2 Log in as PAR of Sample Operator 1 Select 'Propose Emissions' from 'Compliance' menu	Blank Emissions form opens	As expected	SK

444	Enter Installation ID number of Sample Operator 1 Enter 100 units, Year 2005 Submit	Advisory message confirms that emissions proposal has been sent to the Verifier	As expected	SK
445	Log on as Verifier 1 On Compliance tab, view Approve Emissions DO NOT APPROVE - LEAVE AS PENDING	Emissions proposal is visible on the work queue	As expected	SK
446	Repeat for Sample Operator 2	Both emissions proposals are now awaiting approval from Verifier 1	As expected	SK
447	Log in as PAR of Sample Operator 1 Resubmit Emissions proposal for 2005	Permitted	As expected	SK
448	Log in as PAR of Sample Operator 2 Resubmit Emissions proposal for 2005	Not permitted - no Verifier has been appointed	As expected	SK
449	Log on as PAR of Sample Operator 1 (AAR approval required) Select 'Propose Transfer' from 'Transactions' menu	Blank Transfer form opens, displaying name of account, account ID and current balance	As expected	SK
450	Enter 1000 units to transfer Leave Country of Origin, Unit Type and Commitment Period at default Enter Account ID number of the test Operator Holding Account created in the General tests Click Get Account Details	Correct Organisation name, Account Name and Account Type are displayed	As expected	SK
451	Click Submit	Confirmation page opens displaying details of:	As expected	SK
452		Transferring and Acquiring accounts	As expected	SK
453		Units to be transferred	As expected	SK
454	Click Confirm	Advisory message confirms the transfer	As expected	SK
455	View email	Alert email has been sent to External AAR	No email. Is this as required? No email has been received on any test run	SK
456	Log on as External AAR On the Admin tab, view AAR Queue	Transfer request is on the queue	As expected	SK
457	Select proposal and view details	Transaction details include: Correct details of the transferring Organisation/account Correct details of the Acquiring Organisation/Account The number of units transferred The name of the Requester Correct details of the Ext AAR Details of the units to be transferred	As expected	SK

458	Click Approve Request	Advisory message confirms that the approval has been forwarded to CITL	As expected	SK
459	View email	Confirmation emails have been sent to the PAR and SAR of the transferring and acquiring accounts	As expected	SK
460	Log in as PAR of Sample Operator 1 View Account Details	Transaction details show 1000 units transferred out Status is Complete	As expected	SK
461	View Balance Details	Balance has been reduced by 1000	As expected	SK
462	Log on as PAR of the acquiring account View Account Details	Transaction details show 1000 units Status is Complete	As expected	SK
463	View Balance Details	1000 units are displayed Status is Active	As expected	SK
464	Block an account containing units, and Propose transfer from that account to Sample Operator 2	Not permitted - advisory message that the account is blocked	As expected	SK
465	Propose Transfer from Sample Operator 1 to the blocked account	Permitted. Units are transferred successfully	As expected	SK
466	**External Transfer**			
467	Log in to <<registry A>> as Admin user Select 'Propose Transfer' from 'Transaction Management' menu Select <<transferror account>> Select an account as appropriate Enter 100 units for transfer to the external account in <<registry B>> Approve transfer	Transfer successful	As expected	SK
468	View Balance Details for both accounts	External account in <<registry B>> has increased by 100 units Account in <<registry A>> has decreased by 100 units	As expected	SK
469	Log in to <<registry A>> as Admin user. Select Propose Transfer, enter 101 units for transfer to a non-existent account in <<registry B>>	Transfer fails {at what point does it fail?}	As expected	SK
470	Log in to <<registry B>> as Admin user Select 'Propose Transfer' from 'Transaction Management' menu Select <<transferror account>> Select an account as appropriate Enter 100 units for transfer to the external account in <<registry A>> Approve transfer	Transfer successful	As expected	SK
471	View Balance Details for both accounts	External account in <<registry A>> has increased by 100 units Account in <<registry B>> has decreased by 100 units	As expected	SK

Annex 3: Database structure

Database structure of the Danish registry system[3]:
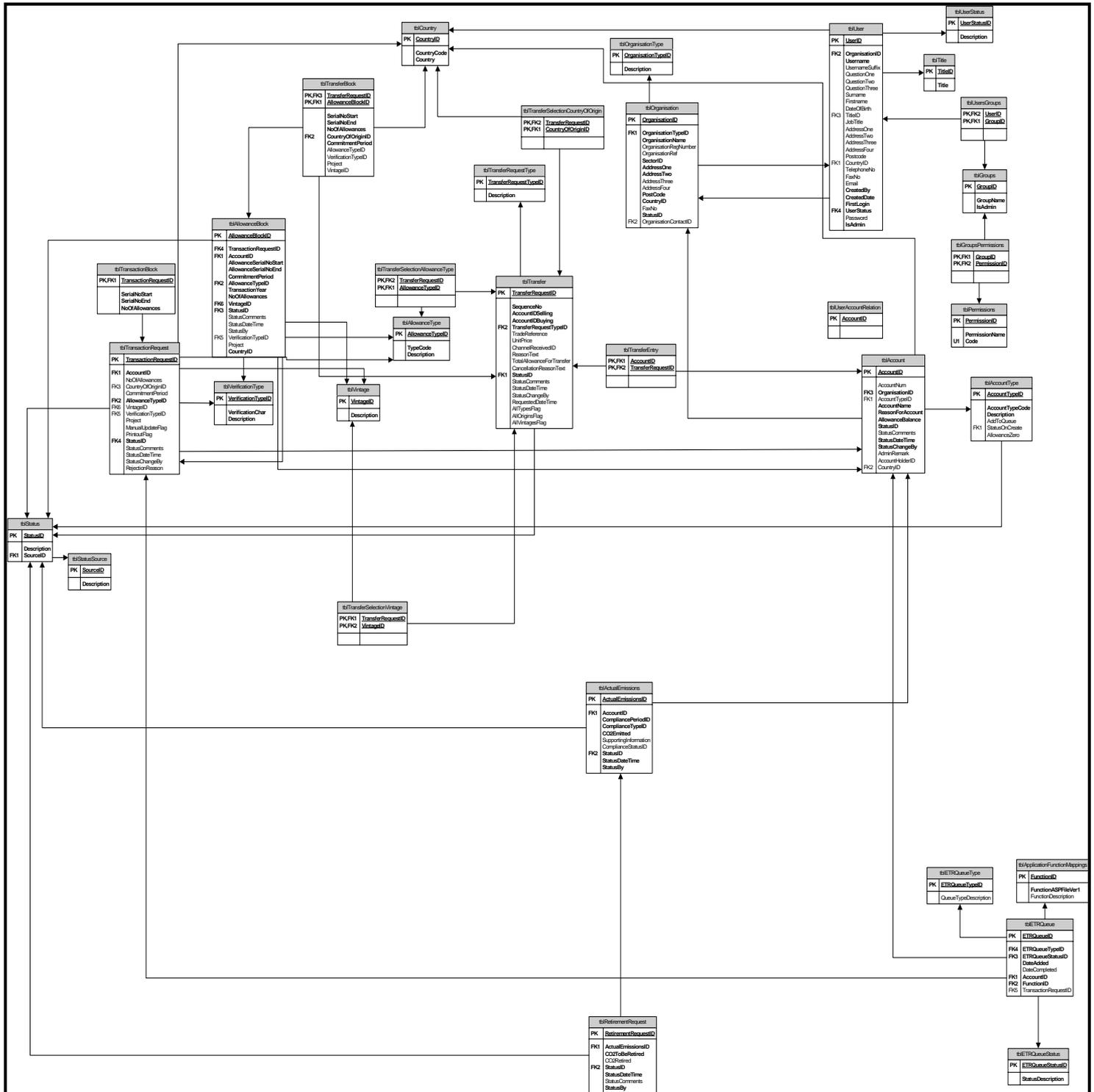
[3] A more legible version of the chart is available within the European Commission. An electronic version can be obtained from the Danish EPA.